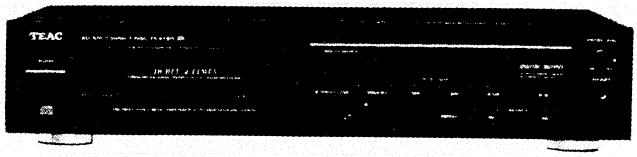
TEAC®



SERVICE MANUAL

PD-465/475
ED-500/570

Compact Disc Player

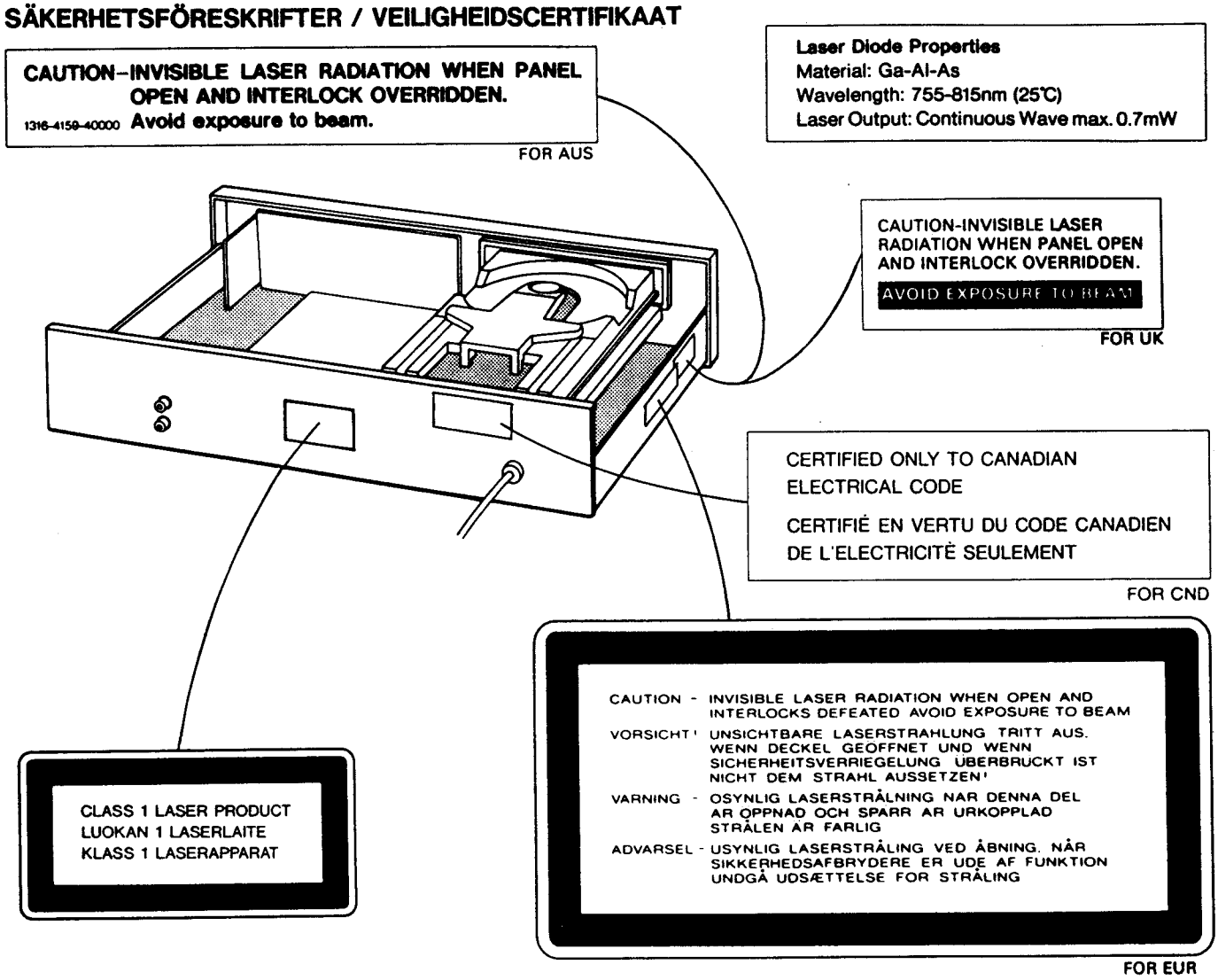
COMPACT disc DIGITAL AUDIO

Effective: October. 1990

5704050700

SAFETY CERTIFICATION

SICHERHEITSBESTIMMUNGEN / CERTIFICAT DE SÉCURITÉ / SAFETY CERTIFICATION SÄKERHETSFÖRESKRIFTER / VEILIGHEIDSCERTIFIKAAT


CAUTION–INVISIBLE LASER RADIATION WHEN PANEL OPEN AND INTERLOCK OVERRIDDEN.
1316-4158-40000 Avoid exposure to beam.
FOR AUS
Laser Diode Properties
Material: Ga-Al-As
Wavelength: 755-815nm (25℃)
Laser Output: Continuous Wave max. 0.7mW
CAUTION-INVISIBLE LASER RADIATION WHEN PANEL OPEN AND INTERLOCK OVERRIDDEN.
AVOID EXPOSURE TO BEAM
FOR UK
CERTIFIED ONLY TO CANADIAN ELECTRICAL CODE
CERTIFIÉ EN VERTU DU CODE CANADIEN DE L'ELECTRICITÉ SEULEMENT
FOR CND
CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT
CAUTION - INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED AVOID EXPOSURE TO BEAM
VORSICHT! UNSICHTBARE LASERSTRAHLUNG TRITT AUS. WENN DECKEL GEOFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRUCKT IST NICHT DEM STRAHL AUSSETZEN!
VARNING - OSYNLIG LASERSTRÅLNING NAR DENNA DEL AR OPPNAD OCH SPARR AR URKOPPLAD STRÅLEN AR FARLIG
ADVARSEL - USYNLIG LASERSTRÅLING VED ÅBNING. NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING
FOR EUR

CAUTION– THIS PRODUCT CONTAINS A LOW POWER LASER DEVICE. TO ENSURE CONTINUED SAFETY DO NOT REMOVE ANY COVERS OR ATTEMPT TO GAIN ACCESS TO THE INSIDE OF THE PRODUCT.
REFER ALL SERVICING TO QUALIFIED PERSONNEL.

ACHTUNG– WENN ANDERE ALS DIE HIER BESCHRIEBENEN BEDIENUNGS-ODER JUSTIEREINRICHTUNGEN BENÜTZT ODER ANDERE ARBEITEN AUSGEFÜHRT WERDEN, KANN DIES ZU GEFÄHRLICHER STRAHLUNGSEINWIRKUNG FÜHREN.

ATTENTION– L'EMPLOI D'ORGANES DE COMMANDE OU DE RÉGLAGE, OU L'EXÉCUTION DE PROCÉDURES, AUTRES QUE CEUX SPÉCIFIÉS DANS LE MODE D'EMPLOI, PEUT PROVOQUER UNE EXPOSITION DANGEREUSE AU RAYONNEMENT.

CAUTION– USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

VARNING– BRUK AV KONTROLLER, JUSTERINGAR ELLER MANÖVRERING AV APPARATEN ANNAT ÄN HÄRI ANGIVNA KAN INNEBÄRA STRÅLNINGSRISK.

OPGELET– HET GEBRUIK VAN REGELAARS OF HET MAKEN VAN AFSTELLINGEN E.D. DIE NIET IN DEZE GEBRUIKSAANWIJZING ZIJN BESCHREVEN KAN LEIDEN TOT SCHADELIJKE STRALINGEN.

CAUTELA– L'USO DI COMANDI, AGGIUSTAMENTI O PROCEDIMENTI DIVERSO DA QUELLO QUI SPECIFICATO PUÒ DAR LUOGO AD ESPOSIZIONE A RADIAZIONI PERICOLOSE.

LASER SAFETY

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

SPECIFICATIONS

AUDIO
Number of Channels 2
Frequency Response 2 – 20,000 Hz ±1dB
Signal-to-Noise Ratio 105dB
Dynamic Range 92dB
Harmonic Distortion 0.005% (1kHz)
Wow and Flutter Unmeasurable (Quartz accuracy)
Channel Separation 85dB (1kHz)
Output Analog: 2 V rms

PICKUP
Type High-resolution 3-beam laser pickup
Object Lens Drive System 2-demensional parallel drive
Laser Type AlGaAs type semiconductor laser
Wavelength 780 nm

FUNCTION
Display 6 digit vacuum fluorescent display
Memory 20-selection random programming
Repeat ON/OFF
Remote Control include

SIGNAL FORMAT
Quantization Bit 16 bit linear
Error Correction CIRC (Cross Interleave Reed Solomon Code)
Sampling Frequency 44.1 kHz
Channel Modulation Code EFM (Eight to Fourteen Modulation)
Channel Bit Rate 4.3218 Mb/sec.
Filter 18 bit/4-times Oversampling digital filter +2nd order analog filter
D/A converter 16 bit Dual D/A converter
Output Digital: 0.5Vp-p

DISC
Type Compact Disc (Single CD compatible)
Playing Time Approx. 60 min.
Diameter 120 mm/80 mm
Thickness 1.2 mm
Scanning Velocity 1.2 – 1.4 m/sec.
Track Pitch 1.6 μm

GENERAL
Power Source 110/220 V AC, 50/60 Hz (General Export Model)
120 V AC, 60 Hz (USA/Canada Model)
220 V AC, 50 Hz (Europe Model)
240 V AC, 50 Hz (Australia model)
Power Consumption 9 W
Dimensions (W × H × D) 435 × 90 × 290 mm (17-1/8" × 3-9/16" × 11-7/16")
Weight (net) 3.5 kg (7.72 lbs.)
Standard Accessories Wireless Remote Control Unit (RC-392), RCA pin-plug cord, Batteries (UM-4, AAA, LR03 type) × 2

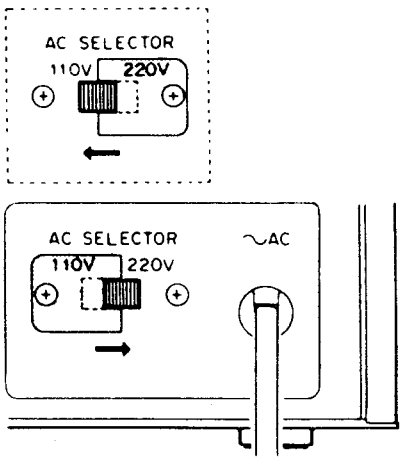
- Improvements may result in specification or feature changes without notice.
- Photos and illustrations may differ slightly from production models.

This product is manufactured to comply with the radio interference of EEC directive "82 499/EEC"

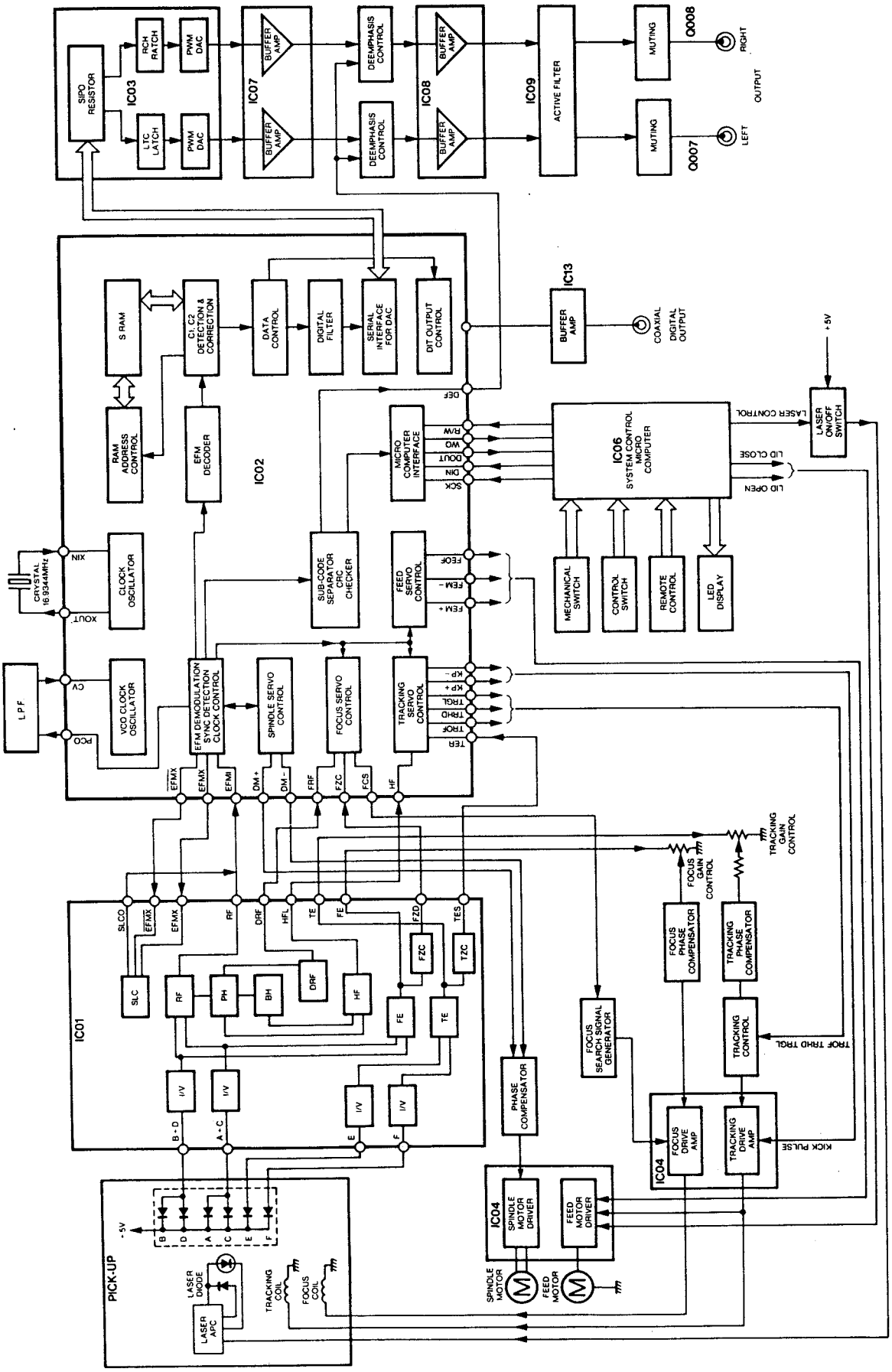
Voltage Conversion (General export models only)

This unit is adjusted to operate at the electric voltage specified on the unit or packing carton. It is neccessary to change the voltage requirements of the model match your area, use the following procedures.

1. Disconnect the power cord from AC outlet.
2. Locate the voltage selector (AC SELECTOR) on the rear panel of the unit as shown in the illustration.
3. Remove the screw together with the plate then slide the switch to voltage requirement of your area.



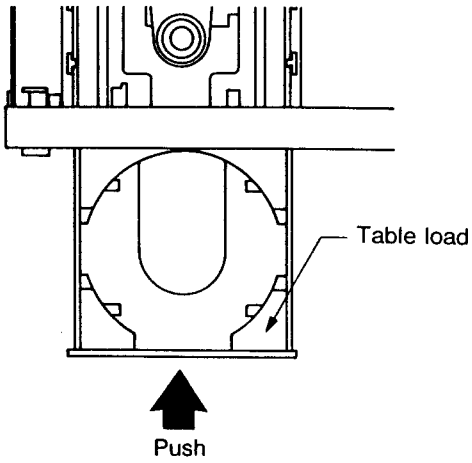
BLOCK DIAGRAM



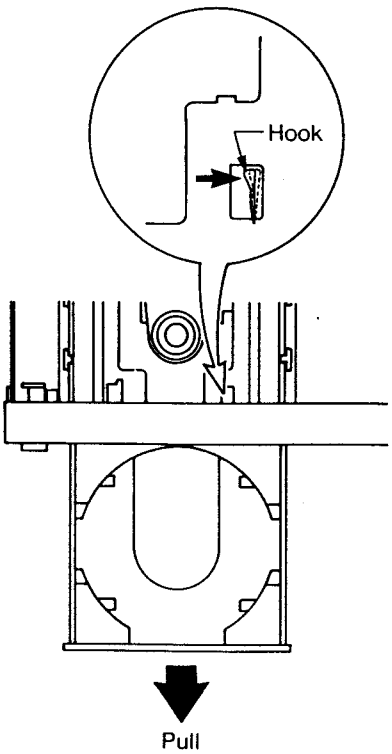
DISASSEMBLY INSTRUCTIONS

REMOVING THE DISC TRAY

1. Apply Power Switch to the set and press the OPEN/CLOSE button to open the table load.
2. Apply OFF the Power Switch while the table load is open, and push the table load back in by hand to close it.

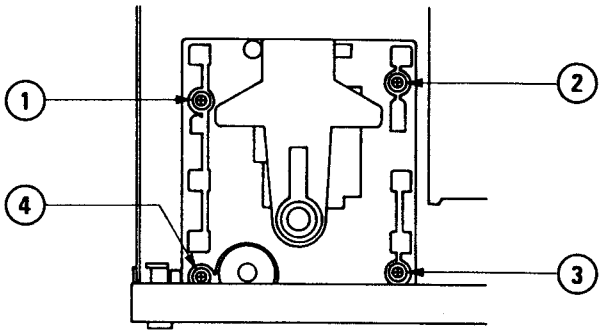


3. Pull out the table load by hand to open it again. The table load will disengage easily and come out smoothly.
4. Now remove the table load from the cabinet while pressing the tab in the direction of the arrow in the diagram below.



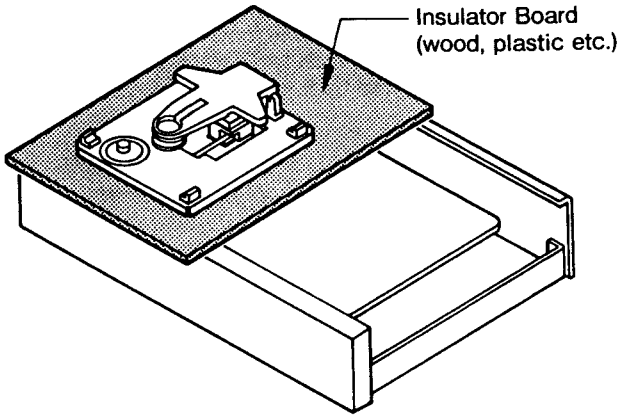
REMOVING THE MECHANISM

1. Take out the eight screws with which the Cabinet Front is mounted in place and remove the Cabinet Front.
2. Take out the four screws (1~4 in the diagram below) with which the mechanism is mounted in place and remove the mechanism.



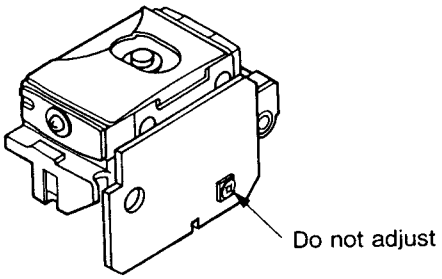
ADJUSTMENT PROCEDURES

CAUTION:
Avoid eye exposure to invisible laser beam which is emitted from laser pickup.



PRECAUTIONS REGARADING ADJUSTMENT

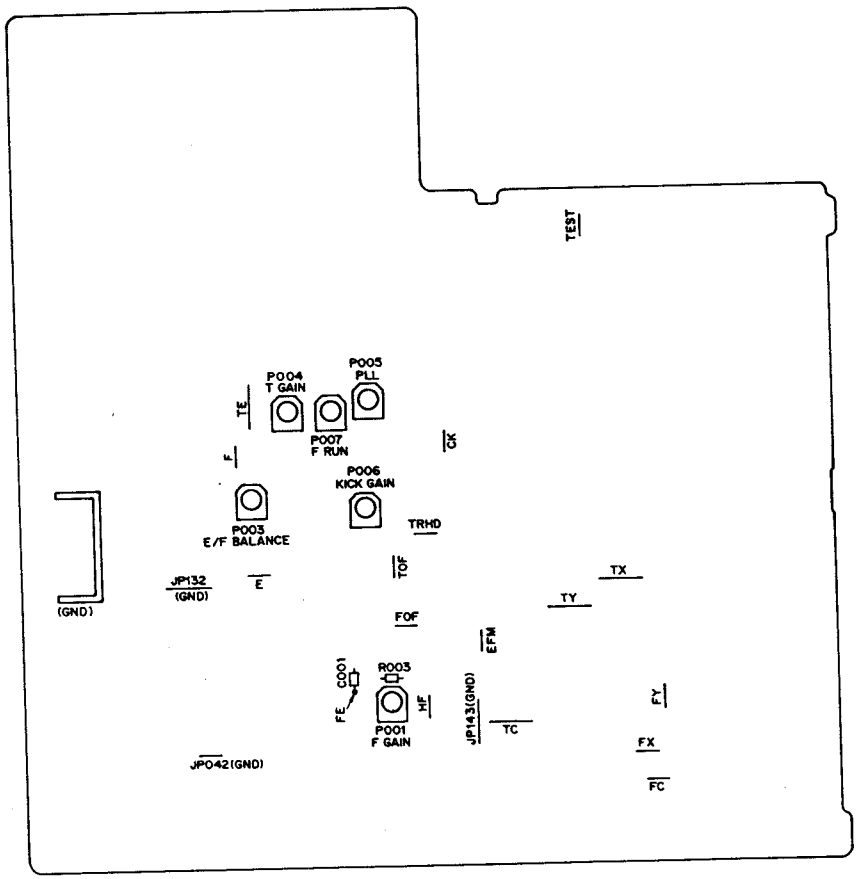
- Adjustment is performed in the indicated order.
- When adjustment is made for one item, check the other items which follow.
- The laser pick-up has already been precisely adjusted. Do not touch its mounting screws or controls.



- When the diffraction grid is adjusted, remove the mechanism. It is convenient to place an insulating panel on top of the chassis, and then to place the mechanism on top of this. (The wires are connected.)

- Refer to the adjustment diagram for the test points and adjustment controls.
- The ground point for the measurement equipment is the test point indicated as **GND**.

ground point of P.C.BORD:
JP042, JP132, JP143



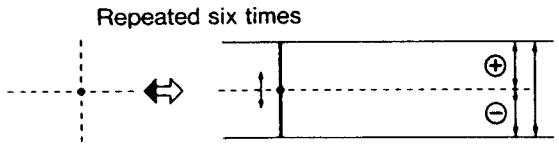
REQUIRED EQUIPMENTS

- DC Voltmeter
- Dualtrace Oscilloscope
- Frequency Counter
- Signal Generator
- Plastic Screwdriver
- Diffraction Grating Adjustment Jig
- Test Disc (SONY: YEDS4, SANYO: MODERN WAVE II)

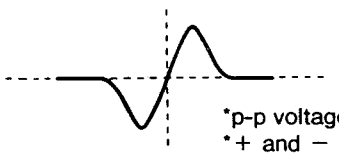
CHECKING FOCUS ERROR SIGNAL

Checking the focus error signal of the pick-up allows for an evaluation of the pick-up. Be sure this is carried out before repair.

1. Turn on the power and set the unit to the STOP mode.
2. Connect an oscilloscope between jumper **C001 (FE)** and **GND**. (Set the time axis to 0.5 seconds/division.)
3. Connect **R003 (FOF)** to **GND**.
4. Press the OPEN/CLOSE button and place the test disc YEDS4 on the table load. Press the OPEN/CLOSE button again.
5. The waveform shown below is displayed six times on the oscilloscope when the table load closes. Check that the p-p voltage is about 8V and that the top and bottom of the waveform are symmetrical.



(When recorded on a memory scope)



*p-p voltage of 8V
*+ and − voltage roughly same

6. The waveform appears again if the OPEN/CLOSE button is pressed again. This allows for confirmation to be made. The pick-up is faulty if confirmation cannot be made.

SETTING OF INITIAL POSITION OF VOLUME

1. The variable resistors are set to the following initial positions.

P001 (FOCUS GAN)	Mechanical center
P003 (E-F BALANCE)	Mechanical center
P004 (TRACKING GAIN)	Mechanical center
P005 (VPLL)	Mechanical center
P006 (KICK GAIN)	Mechanical center
P007 (PLL)	Mechanical center

VOLTAGE PLL ADJUSTMENT

1. Turn on the power and set the unit to the STOP mode.
2. Connect a DC voltmeter between + and − lead of **C019**.
3. Adjust **P005** so that the DC voltmeter indicates 3.95V.

FREE RUN FREQUENCY ADJUSTMENT

1. Turn on the power and set the unit to the STOP mode.
2. Connect the frequency counter between jumper **CK** and **GND** (use probes 10 : 1).
3. Adjust **P007** so that the frequency counter indicates 4.3218MHz.

FOCUS OFFSET CONFIRMATION

1. Turn on the power and set the unit to the STOP mode.
2. Connect a DC voltmeter and oscilloscope between jumper **FC** and **GND**.
3. Short jumper **FOF** and **GND**.
4. Confirm that the indication on the DC voltmeter is −0.7 ~ −1.5V.

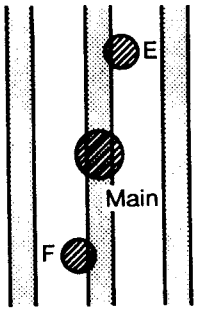
TRACKING OFFSET CONFIRMATION

1. Turn on the power and set the unit to the STOP mode.
2. Connect a DC voltmeter and oscilloscope between jumper **TC** and **GND**.
3. Short jumper **TOF** and **GND**.
4. Confirm that the indication on the DC voltmeter is −50mV ~ −250mV.

NOTE:
This adjustment should be made again after the adjustment of Tracking Gain and E-F balance.

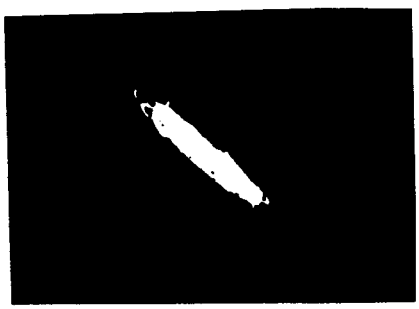
OBSERVATION OF DIFFRACTION GRID

This unit uses a three beam method for the laser pick-up. The position of the E and F beams of provided pick-up is adjusted in relation to the main beam so that they are in the same line.

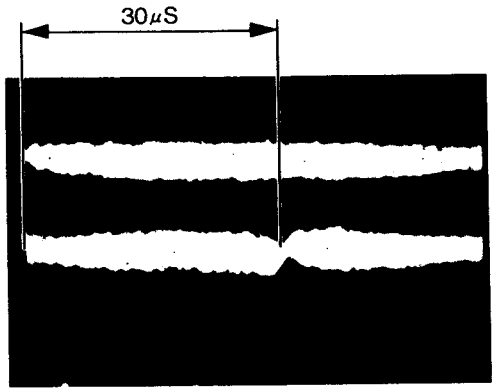


The following is the observation procedure. Carefully check when pick-up is replaced.

1. Press the PLAY button. Short jumper **TEST** and **GND**, and jumper **TX** and **GND** so that tracking servo is off.
2. Connect the dualtrace oscilloscope, jumper **E** to CH1 and jumper **F** to CH2.
3. Place test disc YEDS4 on the table load and press the PLAY button.
4. Observe the lissajous figure of the waveform indicated on the oscilloscope.



5. Press the STOP button. Remove the short between jumper **TEST** and **GND**, and jumper **TX**.
6. Observe the waveform of the signal between jumper **E** and jumper **F** using the dualtrace oscilloscope (Monitored in ALT mode). The beam **E** and **F** are in the same pit line if the trigger of waveform **F** is approximately 30μs behind the point (Positon where waveform hollows out) where the waveform **E** is triggered.

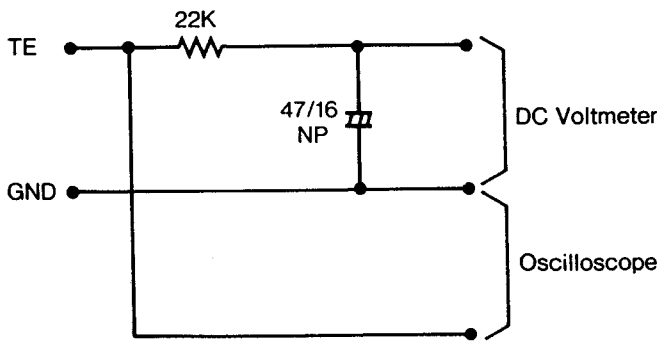


The two beams are on the same pit line.
(100mV/DIV: 5μSec/DIV)

When observation of the waveform is difficult, the trigger level can be varied.

E-F BALANCE ADJUSTSMENT

1. Turn on the power. Short jumper **TEST** and **GND**, and jumper **TX** and **GND** so that tracking servo is off.
2. Place test disc MODERN WAVE II on the table load.
3. Connect a DC voltmeter and oscilloscope to jumper **TE** and **GND** through the low-pass filter shown below.



4. Press the PLAY button.
5. Adjust **P003** so that the DC voltmeter and oscilloscope is minimum voltage (wave form on oscilloscope is symmetrical to 0V line).

CONFIRMING JITTER

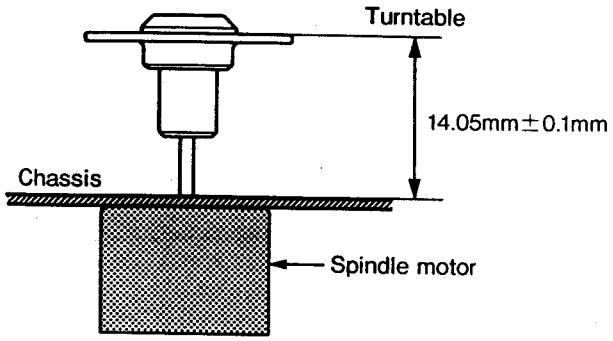
This procedure can be omitted in the case that no jitter counter is equipped.

1. Turn on the power and mount test disc MODERN WAVE II on the table load, and play the fourth program of the disc.
2. Connect an oscilloscope to jumper **HF** and **GND**, and observe the indication is 2.0 ~ 3.3Vp-p.
3. Connecting the jitter counter to jumper **EFM**, make sure that the value of 3T is less than 20nSec.
   (WINDOW WIDTH:600 ~ 850nSec, SET LEVEL: 2.5V)
4. Play tenth program of the disc and observe in the same procedure.

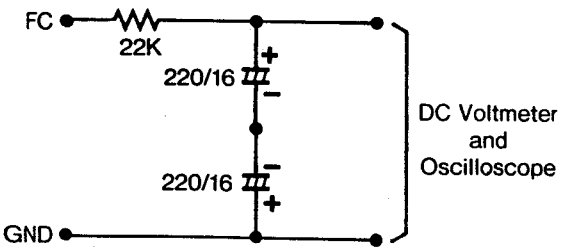
ADJUSTMENT OF TURNTABLE HEIGHT

This adjustment must be made when the motor is replaced.

1. Attach the turntable so that its top surface is 14.05mm ±0.1mm from the top of the chassis.



2. Connect test jumper **FC** to a DC voltmeter and oscilloscope through the low-pass filter.



3. Turn on the power and playback the first selection on test disc MODERN WAVE II.
4. Readjust the height of the turntable if the reading on the DC voltmeter is not in the range of below.

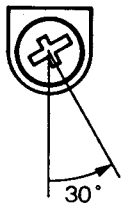
   INSIDE (first selection): 0V±0.2V
   OUTSIDE (tenth selection): 0V±0.35V
   Adjusting turntable height by 0.55 ~ 0.65mm shift voltage by 1V.

ADJUSTMENT OF FOCUS/TRACKING GAIN

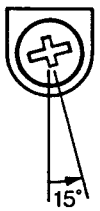
The measurement circuit shown the next page is necessary for accurate adjustment of the focus and tracking gain. If this circuit cannnot be made, make adjustments using the simplified procedure.

Simplified adjustment procedure

- **Focus gain adjustment**
  P001 is set to a position 30° from its mechanical center as shown in the diagram below.



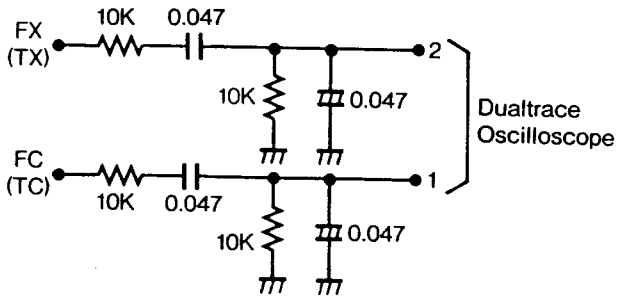
- Tracking gain adjustment
  P004 is set to a position 30° from its mechanical center as shown in the diagram below.



Precise adjustment procedure

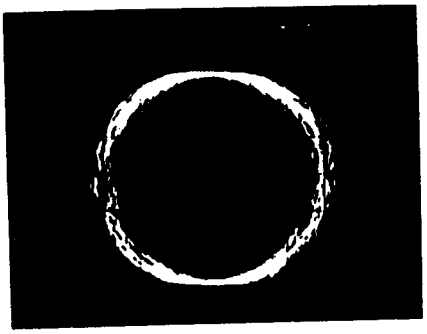
- **Focus gain adjustment**

1. Set the variable resistor **P001** to mechanical center.
2. Turn on the power and playback the test disc MODERN WAVE II.
3. Connect jumper **FX** and **FC** to a dualtrace oscilloscope through the filter circuit as shown below.



4. Aplly a 550Hz 0.3Vp-p signal from the signal generator to jumper **FY**.

5. Observe the resurge waveforms on the oscilloscope, and adjust **P001** so that the phase difference of outputs X and Y from the measurement circuit is 90° as shown below.



- **TRACKING GAIN adjustment**

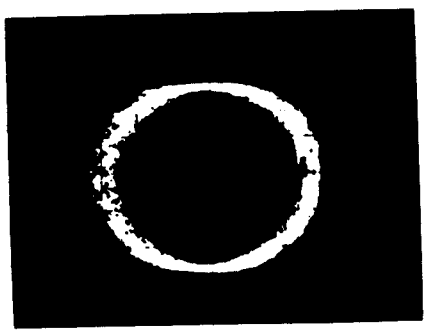
1. Set the variable resistor **P004** to mechanical center.

2. Playback the test disc MODERN WAVE II.

3. Connect jumper **TX** and **TC** to a dualtrace oscilloscope through the filter circuit as same as ADJUSTMENT OF FOCUS GAIN.

4. Apply a 1.6kHz 0.3Vp-p signal from the signal generator to jumper **TY**.

5. Observe the resurge waveforms on the oscilloscope, and adjust **P004** so that the phase difference of outputs X and Y from the measurement circuit is 90° as shown below.



ADJUSTMENT OF KICK GAIN

1. Place the test disc MODERN WAVE II on the turntable.

2. Set the oscilloscope at the NORMAL TRIG. and connect jumper **TRHD** to the external trigger terminal. Then, connect the channels, 1 and 2, to the jumper, **HF** and **TE**, respectively.

3. Switch on the power. In the state of playing the first tune, make it pause and observe the waveforms of **HF** and **TE** triggered by **TRHD**.

4. Adjust the **P006** so that the waveform is observed, for making a track jump between 1 and 1.5 track.

TE
(1V/DIV
0.2mSec/DIV)

HF
(1V/DIV
0.2mSec/DIV)

Waveform showing Short Kick Gain

TE
(1V/DIV
0.2mSec/DIV)

HF
(1V/DIV
0.2mSec/DIV)

Waveform showing Proper Kick Gain

TE
(1V/DIV
0.2mSec/DIV)

HF
(1V/DIV
0.2mSec/DIV)

Waveform showing Excessive Kick Gain

CONFIRMATION OF ACCESS MOVEMENT

Shift the PLL FREQUENCY 4.3218MHz by ±50kHz (4.2700 ~ 4.3700MHz), and check search operation is adequate, while searching first selection through the last repeatedly. Readjust the PLL FREQUENCY 4.3218MHz.

SAFETY INTERLOCK

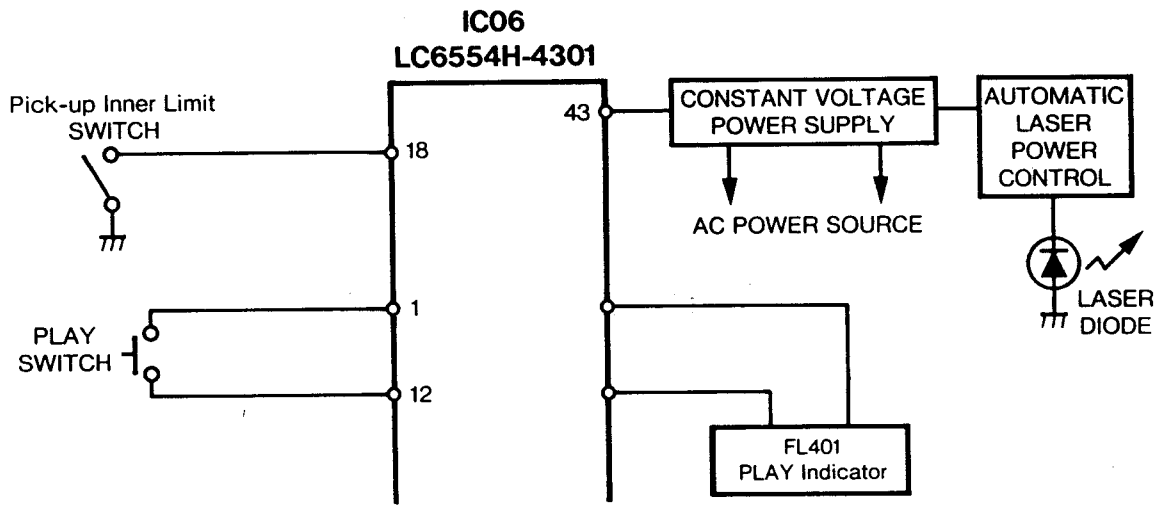
The Digital Compact Disc Player reads the disc signal by detecting the laser beam. It must be avoided for the human body to directly receive the beam. Especially human eyes are badly affected by the beam. Therefore, the unit is equipped with an interlock to prevent the unnecessary laser outputs.

The laser outputs are controlled by the injection or cutoff of the constant voltage source to the laser diode with Pin 43 of IC06 (LC6554H-4301). When Pin 43 is in "L" (Low) level, the laser emits the beam. When Pin 43 is in "H" (High) level, the laser does not emit the beam.
Pin 43 is set in "H" level when the unit is loaded with the disc and it reads the index signals or when the unit is set in the play mode after that. When the unit reads the index signals and the following two conditions are met, the laser emits the beam.

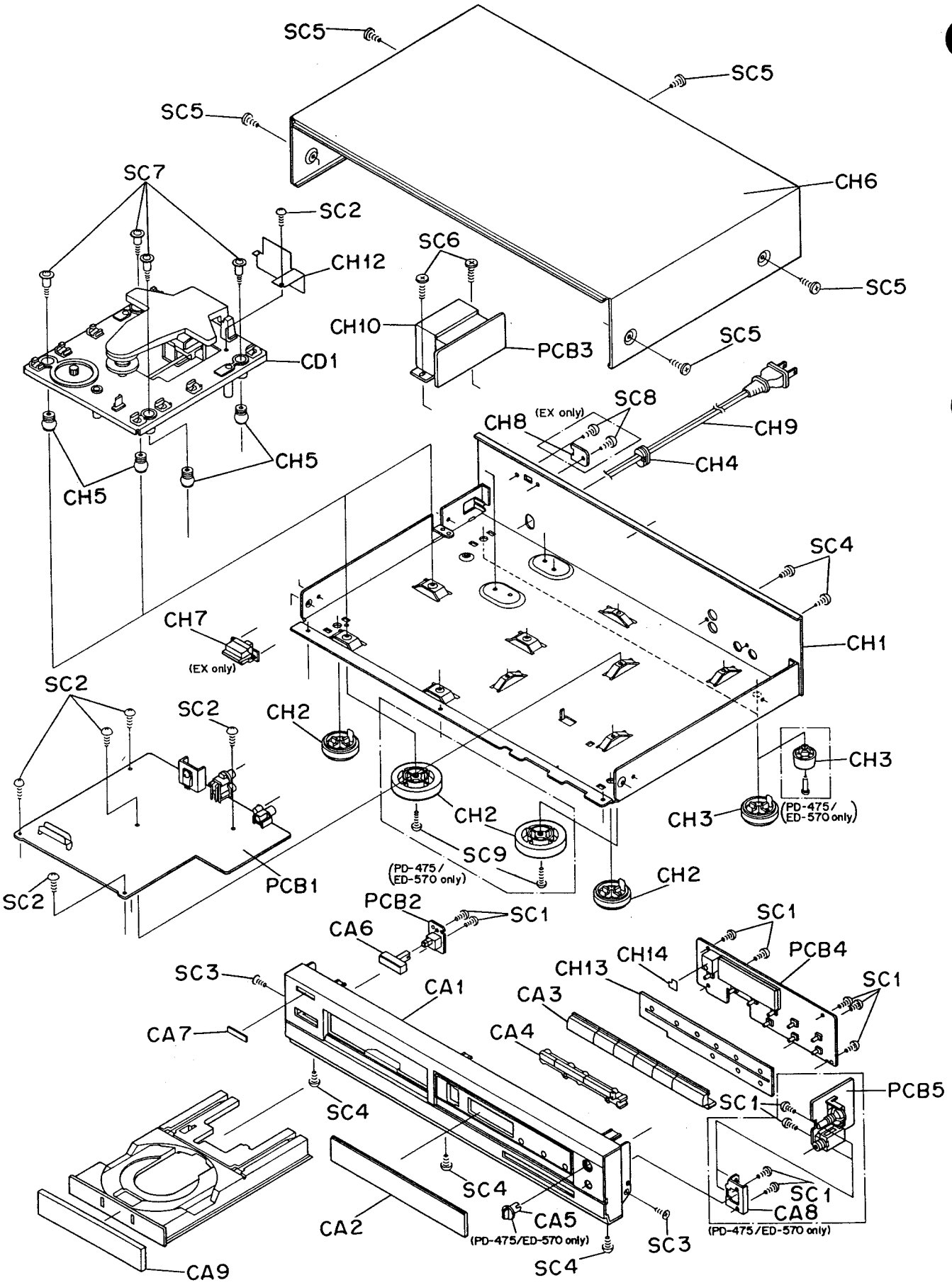
1) When the Pick-up Inner Limit Switch is on. (The disc tray is closed.)
2) The pickup is located at the area of the minimum internal circumference.

After the above conditions are met and the index signals have been read, the laser emits the beam when the following two conditions are met.

1) When the PLAY button is pressed.
2) When the PLAY indicator is on.



CABINET EXPLODED VIEW



EXPLODED VIEW CABINET PARTS LIST....PD-465

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
CA1	*9A02279000	FRONT PANEL,	
CA2	*9A02279100	WINDOW,	
CA3	*9A02279200	BUTTON,	
CA4	*9A02278900	KNOB,C	
CA6	*9A02262100	KNOB,POWER	
CA7	*5720175500	EMBLEM,TEAC	
CA9	*9A02262300	COVER,DECORATE	
CH1	*9A02274300	CHASSIS,[A].....	Ser.No.002200 and before [A]
CH1	*9A02749500	CHASSIS,[A].....	Ser.No.002201 and after [A]
CH1	* "	" [E].....	Ser.No.000001 and after [E]
CH1	*9A02280500	CHASSIS,[GE].....	Ser.No.000866 and before [GE]
CH1	*9A02749700	CHASSIS,[GE].....	Ser.No.000867 and after [GE]
CH2	9A02118600	LEG,FRONT	
CH3	9A02118700	LEG,REAR	
CH4	9A01583900	BUSHING,4N-4	
CH5	9A01584200	CUSHION,RUBBER	
CH6	*9A02118200	COVER,TOP	
CH7	9A00181700	SWITCH,SLIDE 3P [GE]	
CH8	*9A00181500	PLATE,PAD SWITCH [GE]	
CH9	⚠ 9A00443300	POWER CORD,[E]	
CH9	⚠ 9A01994600	POWER CORD,[A]	
CH9	⚠ 9A02280800	POWER CORD,[GE]	
CH10	⚠ 9A02279900	POWER TRANS,[E]	
CH10	⚠ 9A02280300	POWER TRANS,[A]	
CH10	⚠ 9A02280700	POWER TRANS,[GE]	
CH11	5761259900	WIRE BAND,	
CH12	*9A02274200	SHEET,DECK	
CH13	*9A02354600	SHEET,	
CH14	*9A02354200	SHEET,	
CM1	*9A01585800	DECK ASSY,CD86F2A (See Mechanism Parts List)	
PCB1	*9A02274800	MAIN PCB ASSY	
PCB2	*9A02274900	SWITCH PCB ASSY	
PCB3	*9A02275020	TRANS PCB ASSY (E,A)	
PCB3	*9A02275040	TRANS PCB ASSY (GE)	
PCB4	*9A02275100	CONTROL PCB ASSY	
SC1	9A00989300	SCREW,BRZ S-TPG M2.6X6	
SC2	9A00991000	SCREW,BRZ S-TPG M3X6	
SC3	9A01583100	SCREW,FLT S-TPG M3X6	
SC4	9A00767100	SCREW,BRZ S-TPG M3X8	
SC5	9A01041200	SCREW,BIN S-TPG M3X8	
SC6	9A01992500	SCREW,BIN S-TPG M4X6	
SC7	9A02262600	SCREW,SPECIAL	
SC8	9A02281200	SCREW,PAN M3X8	
	*9A02749300	LABEL,RATING [A].....	Ser.No.002201 and after [A]
	*	LABEL,RATING [E].....	Ser.No.000001 and after [E]
	*9A02749600	LABEL,RATING [GE].....	Ser.No.000867 and after [GE]
	*9A02280000	SHEET,TRANS	

[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *require longer delivery time

EXPLODED VIEW CABINET PARTS LIST....ED-500

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
CA1	*9A02273900	FRONT PANEL,	
CA2	*9A02274000	WINDOW,	
CA3	*9A02274100	BUTTON,	
CA4	*9A02273700	KNOB,C	
CA6	*9A02262100	KNOB,POWER	
CA7	*9A00823000	BADGE,TEAC	
CA9	*9A02273800	COVER,DECORATE	
CH1	*9A02274300	CHASSIS,[US].....	Ser.No.003400 and berore [US]
CH1	* "	" ,[C].....	Ser.No.000401 and berore [C]
CH1	*9A02749500	CHASSIS,[US].....	Ser.No.003401 and after [US]
CH1	*9A02749500	CHASSIS,[C].....	Ser.No.000402 and after [C]
CH2	9A02274400	LEG,FRONT	
CH3	9A02118700	LEG,REAR	
CH4	9A01583900	BUSHING,4N-4	
CH5	9A01584200	CUSHION,RUBBER	
CH6	*9A02118200	COVER,TOP	
CH9	⚠ 5761270200	POWER CORD,	
CH10	⚠ 9A02274700	POWER TRANS,	
CH11	5761259900	WIRE BAND,	
CH12	*9A02274200	SHEET,DECK	
CH13	*9A02354600	SHEET,	
CH14	*9A02354200	SHEET,	
CM1	*9A01585800	DECK ASSY,CD86F2A (See Mechanism Parts List)	
PCB1	*9A02274800	MAIN PCB ASSY	
PCB2	*9A02274900	SWITCH PCB ASSY	
PCB3	*9A02275000	TRANS PCB ASSY (US,C)	
PCB4	*9A02275100	CONTROL PCB ASSY	
SC1	9A00989300	SCREW,BRZ S-TPG M2.6X6	
SC2	9A00991000	SCREW,BRZ TPG M3X6	
SC3	9A01583100	SCREW,FLT S-TPG M3X6	
SC4	9A00767100	SCREW,BRZ S-TPG M3X8	
SC5	9A01041200	SCREW,BIN S-TPG M3X8	
SC6	9A01992500	SCREW,BIN S-TPG M4X6	
SC7	9A02262600	SCREW,SPECIAL	
SC8	9A00767100	SCREW,BRZ S-TPG M3X8	
	*9A02749900	LABEL,RATING [US].....	Ser.No.003401 and after [US]
	*9A02749800	LABEL,RATING [C].....	Ser.No.000402 and after [C]

[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *reguire longer delivery time

EXPLODED VIEW CABINET PARTS LIST....PD-475

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
CA1	*9A02354100	FRONT PANEL,	
CA2	*9A02279100	WINDOW,	
CA3	*9A02279200	BUTTON,	
CA4	*9A02278900	KNOB,C	
CA5	*9A00419800	KNOB,	
CA6	*9A02354000	KNOB,POWER	
CA7	*5720175500	EMBLEM,TEAC	
CA8	*9A02353900	ANGLE,MOUNT	
CA9	*9A02262300	COVER,DECORATE	
CH1	*9A02354300	CHASSIS,[E].....	Ser.No.000200 and before [E]
CH1	*9A02750200	CHASSIS,[E].....	Ser.No.000201 and after [E]
CH1	*9A02359000	CHASSIS,[GE].....	Ser.No.000300 and before [GE]
CH1	*9A02750500	CHASSIS,[GE].....	Ser.No.000301 and after [GE]
CH2	9A02537700	LEG,FRONT	
CH3	9A02537800	LEG,REAR	
CH4	9A01583900	BUSHING,4N-4	
CH5	9A01584200	CUSHION,RUBBER	
CH6	*9A02118200	COVER,TOP	
CH7	9A00181700	SWITCH,SLIDE 3P	
CH8	*9A00181500	PLATE,PAD SWITCH [GE]	
CH9	⚠ 9A00443300	POWER CORD,[E]	
CH9	⚠ 9A02280800	POWER CORD,[GE]	
CH10	⚠ 9A02279900	POWER TRANS,[E]	
CH10	⚠ 9A02280700	POWER TRANS,[GE]	
CH11	5761259900	WIRE BAND,	
CH12	*9A02274200	SHEET,	
CH13	*9A02354600	SHEET,	
CH14	*9A02354200	SHEET,	
CM1	*9A01585800	DECK ASSY,CD86F2A (See Mechanism Parts List)	
PCB1	*9A02353500	MAIN PCB ASSY	
PCB2	*9A02274900	SWITCH PCB ASSY	
PCB3	*9A02275020	TRANS PCB ASSY [E]	
PCB3	*9A02275040	TRANS PCB ASSY [GE]	
PCB4	*9A02353600	CONTROL PCB ASSY	
PCB5	*9A02353400	H.P. PCB ASSY	
SC1	9A00989300	SCREW,BRZ S-TPG M2.6X6	
SC2	9A00991000	SCREW,BRZ S-TPG M3X6	
SC2	9A00991000	SCREW,BRZ S-TPG M3X6	
SC3	9A01583100	SCREW,FLT S-TPG M3X6	
SC4	9A00767100	SCREW,BRZ S-TPG M3X8	
SC4	9A00767100	SCREW,BRZ S-TPG M3X8	
SC5	9A01041200	SCREW,BIN S-TPG M3X8	
SC6	9A01992500	SCREW,BIN S-TPG M4X6	
SC7	9A02262600	SCREW,SPECIAL	
SC8	9A00821300	SCREW,PAN M3X8	
	*9A02750000	LABRL,RATING [E].....	Ser.No.000201 and after [E]
	*9A02750400	LABEL,RATING [GE].....	Ser.No.000301 and after [GE]

[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *require longer delivery time

EXPLODED VIEW CABINET PARTS LIST....ED-570

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
CA1	*9A02537300	FRONT PANEL,	
CA2	*9A02537400	WINDOW,	
CA3	*9A02274100	BUTTON,	
CA4	*9A02273700	KNOB,C	
CA5	*9A00419800	KNOB,	
CA6	*9A02262100	KNOB,POWER	
CA7	*9A00823000	BADGE,TEAC	
CA8	*9A02353900	ANGLE,MOUNT	
CA9	*9A02273800	COVER,DECORATE	
CH1	*9A02537600	CHASSIS,.....	Ser.No.000300 and before [C]
CH1	*9A02750200	CHASSIS,.....	Ser.No.000301 and after [C]
CH1	* "	" ,.....	Ser.No.000001 and after [US]
CH2	9A02537700	LEG,FRONT	
CH3	9A02537800	LEG,REAR	
CH4	9A01583900	BUSHING,4N-4	
CH5	9A01584200	CUSHION,RUBBER	
CH6	*9A02118200	COVER,TOP	
CH9	⚠ 5761270200	POWER CORD,	
CH10	⚠ 9A02274700	POWER TRANS,	
CH11	5761259900	WIRE BAND,	
CH12	*9A02274200	SHEET,	
CH13	*9A02354600	SHEET,	
CH14	*9A02354200	SHEET,	
CM1	*9A01585800	DECK ASSY,CD86F2A (See Mechanism Parts List)	
PCB1	*9A02353500	MAIN PCB ASSY	
PCB2	*9A02274900	SWITCH PCB ASSY	
PCB3	*9A02275000	TRANS PCB ASSY [US/C]	
PCB4	*9A02353600	CONTROL PCB ASSY	
PCB5	*9A02538000	H.P. PCB ASSY	
SC1	9A00989300	SCREW,BRZ S-TPG M2.6X6	
SC2	9A00991000	SCREW,BRZ S-TPG M3X6	
SC3	9A01583100	SCREW,FLT S-TPG M3X6	
SC4	9A00767100	SCREW,BRZ S-TPG M3X8	
SC5	9A01041200	SCREW,BIN S-TPG M3X8	
SC6	9A01992500	SCREW,BIN S-TPG M4X6	
SC7	9A02262600	SCREW,SPECIAL	
SC9	9A00766700	SCREW,BRZ S-TPG M3X8	
	9A02750300	LABEL,RATING [C].....	Ser.No.000301 and after [C]
	9A02750600	LABEL,RATING [US].....	Ser.No.000001 and after [US]

[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *regulre longer delivery time

INCLUDED ACCESORIES PARTS LIST.....PD-465

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	*9A02279400	REMOTE CONTROL,...	
	*9A02213100	OWNER'S MANUAL,[E]....	
	*9A02218700	OWNER'S MANUAL,[A]....	
	*9A02303600	OWNER'S MANUAL,[GE]...	
	9A00768900	PLUG CORD,RCA 0.7 BK	
	9A02275300	DRY CELL,UM-4(D)EXP	

INCLUDED ACCESORIES PARTS LIST.....ED-500

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	*9A02275200	REMOTE CONTROL,...(ED-500)	
	*9A02213000	OWNER'S MANUAL,[US]...ED-500	
	*9A02257800	OWNER'S MANUAL,[C]....ED-500	
	*9A00768900	PLUG CORD,RCA 0.7 BK	
	9A02275300	DRY CELL,UM-4(D)EXP	

INCLUDED ACCESORIES PARTS LIST.....PD-475

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	*9A02302700	OWNER'S MANUAL,[E]	
	*9A02461100	OWNER'S MANUAL,[GE]	
	9A02275300	DRY CELL,UM-4(D)EXP	
	*9A02355700	REMOTE CONTROL,	
	9A00768900	PLUG CORD,RCA 0.7 BK	

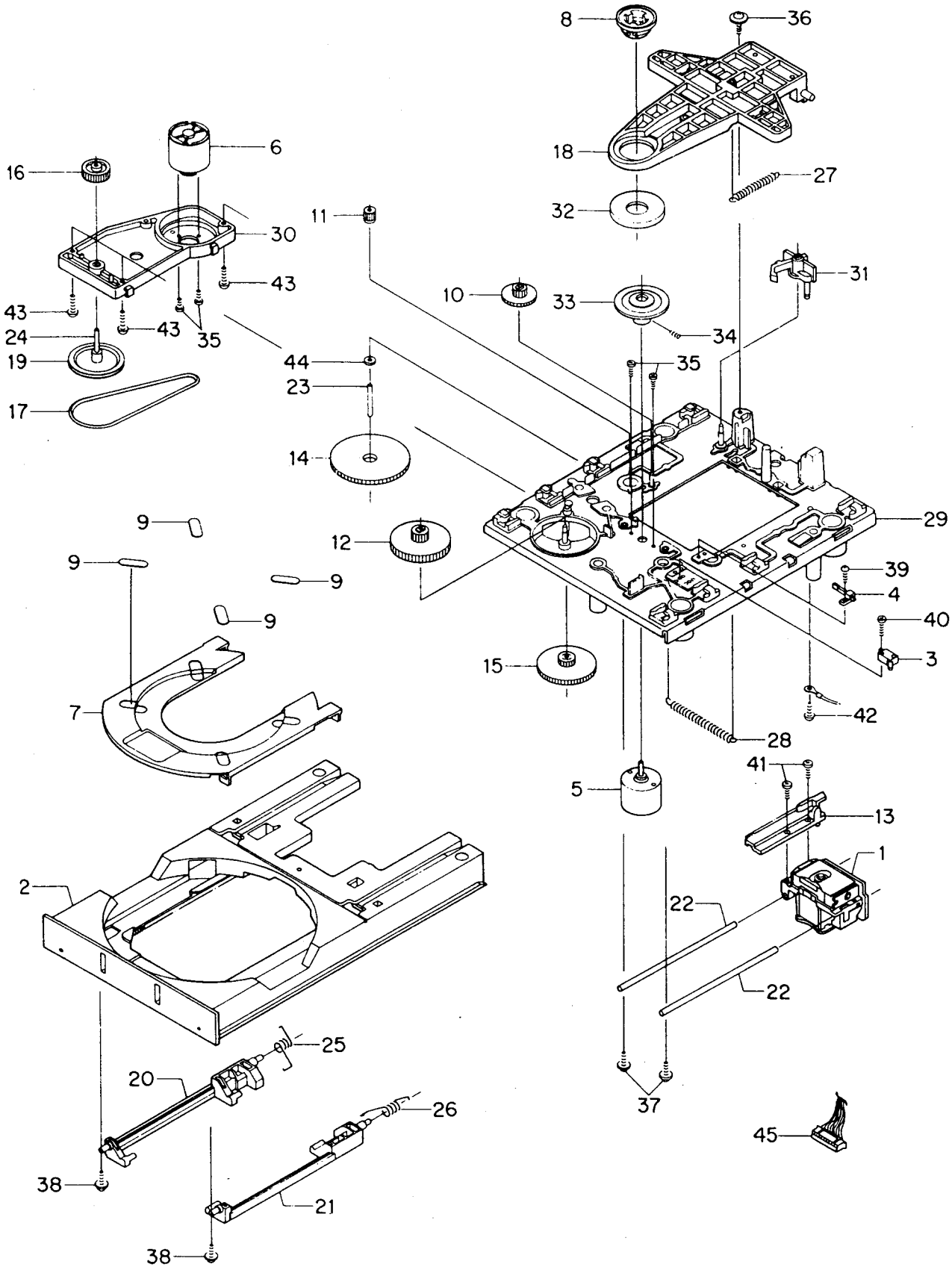
INCLUDED ACCESORIES PARTS LIST.....ED-570

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A02461000	OWNER'S MANUAL,[US]	
	9A02465400	OWNER'S MANUAL,[C]	
	9A02275300	DRY CELL,UM-4(D)EXP	
	9A02538100	REMOTE CONTROL,	
	9A00768900	PLUG CORD,RCA 0.7 BK	

[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *require longer delivery time

MECHANISM EXPLODED VIEW



MECHANISM PARTS LIST

MECHANISM PARTS LIST....PD-465/ED-500/PD-475/ED-570

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1	9A01035801	PICK UP ASSY, SF90	
2	*9A01036100	TABLE,LOAD	
3	9A01036200	SW.,LEVER IPIT	
4	9A00171900	SW.,LEAF	
5	9A01590600	MOTOR,SPINDLE	
6	9A01036400	MOTOR,LOADINGE	
7	*9A01036500	TABLE,CD	
8	*9A01036600	HOLDER,DISC	
9	*9A01036700	PAD,DISC (FELT)	
10	*9A01036800	GEAR,PICK UP	
11	*9A01036900	GEAR,MOTOR	
12	*9A01037000	GEAR,TABLE LOAD	
13	*9A01037100	GEAR,PICK UP RACK	
14	*9A01037200	GEAR,LOAD PU	
15	*9A01037300	GEAR,LOAD T. L	
16	*9A01037400	GEAR,	
17	*9A01037500	BELT,	
18	*9A01037600	FLAP,DISK CRAMP	
19	*9A01037700	PULLEY,	
20	*9A01037800	LEVER,DISK HOLD L	
21	*9A01037900	LEVER,DISK HOLD R	
22	*9A01038000	SHAFT,PICK UP	
23	*9A01038100	SHAFT,GEAR (S)	
24	*9A01038200	SHAFT,PULLEY	
25	*9A01038300	SPRING,LEVER L.	
26	*9A01038400	SPRING,LEVER R.	
27	*9A01038500	SPRING,FLAP DISC CR	
28	*9A01038600	SPRING,ARM	
29	*9A01038700	CHASSIS ASSY,	
30	*9A01039100	CHASSIS SUB ASSY,	
31	*9A01039400	ARM ASSY,	
32	*9A01590800	MAGNET ASSY,	
33	*9A01040000	TURN TABLE ASSY,	
34	9A00173700	SET SCREW,V-CONE M2X4	
35	9A01040400	SCREW,PAN PCS MI.7X3	
36	5760707700	SCREW,B-TITE SEMS M3X10	
37	9A00173800	SCREW,PAN S-TPG M2.6X6	
38	9A00172200	SCREW,B-TITE SEMS M3X8	
39	9A01040500	SCREW,PAN S-TPG M2X6	
40	9A01040600	SCREW,PAN S-TPG MI.7X10	
41	9A01040700	SCREW,FLT PCS M2X5	
42	9A00991000	SCREW,BRZ S-TPG M3X6	
43	9A01040900	SCREW,BRZ S-TPG M2.6X14	
44	9A01040200	WASHER, M7	
45	9A01585700	CONNECTOR ASSY, 9P	

Parts marked with *reguire longer delivery time

P.C.BOARD PARTS LIST

NOTE:

As regards the resisters and capacitors, refer to the circuit diagrams and the PCB assy drawings contained in this manual.

MAIN PCB ASSY.....PD-465/ED-500

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02274800	MAIN PCB ASSY,
	*9A02275500	PCB,MAIN
CN01	9A00188000	PLUG,6P
CN02	9A01043000	PLUG,6P
CN03	9A01043100	PLUG,9P
D001-003	9A01043400	DIODE,1SS254
D001-003	9A00774800	DIODE,GMA01-BT
D005,008	9A01043400	DIODE,1SS254
D005,008	9A00774800	DIODE,GMA01-BT
D012-016	9A01043400	DIODE,1SS254
D012-016	9A00774800	DIODE,GMA01-BT
D020-025	9A02263400	DIODE,MPG06B
D020-025	9A02263500	DIODE,1A2-E
D026	9A02276100	DIODE,ZENER MTZJ20A
D027	9A02263700	DIODE,ZENER MTZJ7.5A
D028,029	9A01043400	DIODE,1SS254
D028,029	9A00774800	DIODE,GMA01-BT
D030	9A02276200	DIODE,ZENER MTZJ5.6B
D034	9A01043400	DIODE,1SS254
D034	9A00774800	DIODE,GMA01-BT
IC01	9A01169800	IC.,LA9200NM
IC02	9A02263800	IC.,YM7121
IC04	9A01596100	IC.,FA5205P
IC06	9A02276300	IC.,LC6554H4301
IC07	9A01596500	IC.,LA6458SS
IC07	9A01596600	IC LA6462S
IC07	9A01596700	IC.,NJM2068S
IC08	9A01596700	IC.,NJM2068S
IC08	9A00776700	IC.,UPC4570HA
IC09	9A01596500	IC.,LA6458SS
IC09	9A01596700	IC.,NJM2068S
IC09	9A00776700	IC.,UPC4570HA
IC10	9A01596800	IC.,TA78L006AP
IC11	9A00776900	IC.,L78M05
IC11	9A00777000	IC,NJM78M05A
IC11	9A01043900	IC,NJM78M05FA
IC11	9A02264100	IC,MC7805
IC12	9A01596900	IC.,TA79L006P
IC13	9A02276400	IC.,MC74HC00
IC13	9A02276500	IC,MLC74HC00
ID03	9A02263900	IC.,LC7881
JK01	9A01591500	PIN-JACK,2P
JK03	9A02276600	PIN-JACK,1P ORANGE
P001	9A01597000	VR.,10KB
P001	9A01597100	VR.,10KB

MAIN PCB ASSY.....PD-465/ED-500

REF. NO.	PARTS NO.	DESCRIPTION
P003	9A00437000	VR.,100KB
P003	9A02264200	VR.,100KB
P004	9A01597200	VR.,22KB
P004	9A01597300	VR.,22KB
P005,007	9A01597000	VR.,10KB
P006	9A01597400	VR.,100KB
P006	9A00437200	VR.,100KB
Q001,010	9A00777800	TR.,2SA608E/NP
Q001,010	9A01044100	TR.,2SA608-F-NP-AA
Q001,010	9A01597700	TR.,JA101
Q002,003	9A00777500	TR.,2SC536F/NP
Q002,003	9A01044000	TR.,2SC536G/NP/AA
Q002,003	9A01597500	TR.,JC501
Q004	9A01597600	TR.,2SD1012G/SPA
Q005,006	9A00777500	TR.,2SC536F/NP
Q005,006	9A01044000	TR.,2SC536G/NP/AA
Q007,008	9A01597600	TR.,2SD1012G/SPA
Q009	9A00777500	TR.,2SC536F/NP
Q009	9A01044000	TR.,2SC536G/NP/AA
Q009	9A02264300	TR.,JC501
Q011,014	9A00994600	TR.,2SC3400
Q012,013	9A00777800	TR.,2SA608E/NP
Q012,013	9A01044100	TR.,2SA608-F-NP-AA
Q012,013	9A01597700	TR.,JA101
Q020,021	9A00994600	TR.,2SC3400
Q022,023	9A01597600	TR.,2SD1012G/SPA
R133,135 ⚠	9A01598700	R.,FUSIBLE 10 1/4W JA
R134 ⚠	9A00193400	R.,FUSIBLE 10 1/2W J
R136,137 ⚠	9A00193400	R.,FUSIBLE 10 1/2W J
T001	9A02276900	TRANS.,PULSE
X001	9A02264400	CRYSTAL,
X001	9A02264500	CRYSTAL,
X002	9A02291300	CERAMIC,OSC 4.32M
X002	9A02291400	CERAMIC,RESONATOR
	*5760526600	PLATE,HEAT SINK
	*9A01591600	PLATE,HEAT SINK
	9A00766700	SCREW,BRZ S-TPG M3X8

MAIN PCB ASSY.....PD-475/ED-570

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02353500	MAIN PCB ASSY,
	*9A02275500	PCB,MAIN
CN01	9A00188000	PLUG,6P
CN02	9A01043000	PLUG,6P
CN03	9A01043100	PLUG,9P

[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *require longer delivery time

MAIN PCB ASSY.....PD-475/ED-570

REF. NO.	PARTS NO.	DESCRIPTION
CN04	9A02355300	PLUG,7P
D001-003	9A01043400	DIODE,ISS254
D001-003	9A00774800	DIODE,GMA01-BT
D005,008	9A01043400	DIODE,ISS254
D005,008	9A00774800	DIODE,MA01-BT
D012-016	9A01043400	DIODE,ISS254
D012-015	9A00774800	DIODE,GMA01-BT
D020-025	9A02263400	DIODE,MPG06B
D020-025	9A02263500	DIODE,1A2-E
D026	9A02276100	DIODE,ZENER MTZJ20A
D027	9A02263700	DIODE,ZENER MTZJ7.5A
D028,029	9A01043400	DIODE,ISS254
D028,029	9A00774800	DIODE,GMA01-BT
D030	9A02276200	DIODE,ZENER MTZJ5.6B
D032-034	9A01043400	DIODE,ISS254
D032-034	9A00774800	DIODE,GMA01-BT
IC01	9A01169800	IC.,LA9200NM
IC02	9A02263800	IC.,YM7121
IC03	9A02263900	IC.,LC7881
IC04	9A01596100	IC.,FA5205P
IC06	9A02355400	IC.,LC6554H
IC07	9A01596500	IC.,LA6458SS
IC07	9A01596600	IC.,LA6462S
IC07	9A01596700	IC.,NJM2068S
IC08	9A01596700	IC.,NJM2068S
IC08	9A00776700	IC.,UPC4570HA
IC09	9A01596500	IC.,LA6458SS
IC09	9A01596700	IC.,NJM2068S
IC09	9A00776700	IC.,UPC4570HA
IC10	9A01596800	IC.,TA78L006AP
IC11	9A00776900	IC.,L78M05
IC11	9A00777000	IC.,NJM78M05A
IC11	9A01043900	IC.,NJM78M05FA
IC11	9A02341900	IC.,BA178M05
IC11	9A02264100	IC.,MC7805
IC12	9A01596900	IC.,TA79L006P
IC13	9A02276400	IC.,MC74HC00
IC13	9A02276500	IC.,MLC74HC00
JK01	9A01591500	PIN JACK,2P
JK02	9A02355500	JACK,1P
JK03	9A02276600	PIN JACK,1P ORANGE
P001	9A01597000	VR.,10KB
P001	9A01597100	VR.,10KB
P003	9A00437000	VR.,100KB
P003	9A02264200	VR.,100KB
P004	9A01597200	VR.,22KB
P004	9A01597300	VR.,20KB
P005	9A01597000	VR.,10KB
P006	9A01597400	VR.,100KB
P006	9A00437200	VR.,100KB

MAIN PCB ASSY.....PD-475/ED-570

REF. NO.	PARTS NO.	DESCRIPTION
P007	9A01597000	VR.,10KB
Q001	9A00777800	TR.,2SA608E/NP
Q001	9A01044100	TR.,2SA608-F-NP-AA
Q001	9A01597700	TR.,JA101
Q002,003	9A00777500	TR.,2SC536F/NP
Q002,003	9A01044000	TR.,2SC536G/NP/AA
Q002,003	9A01597500	TR.,JC501
Q004	9A01597600	TR.,2SD1012G/SPA
Q005,006	9A01044000	TR.,2SC536G/NP/AA
Q005.006	9A00777500	TR.,2SC536F/NP
Q007,008	9A01597600	TR.,2SD1012G/SPA
Q009	9A00777500	TR.,2SC536F/NP
Q009	9A01044000	TR.,2SC536G/NP/AA
Q009	9A02264300	TR.,JC501
Q010	9A00777800	TR.,2SA608E/NP
Q010	9A01044100	TR.,2SA608-F-NP-AA
Q010	9A01597700	TR.,JA101
Q011	9A02342100	TR.,2SC3400
Q012,013	9A00777800	TR.,2SA608E/NP
Q012,013	9A01044100	TR.,2SA608-F-NP-AA
Q012,013	9A01597700	TR.,JA101
Q014,016	9A02342100	TR.,2SC3400
Q020,021	9A02342100	TR.,2SC3400
Q022,023	9A01597600	TR.,2SD1012G/SPA
R133	9A01598700	R.,FUSIBLE 10 1/4W JA
R134	⚠ 9A00193400	R.,FUSIBLE 10 1/2W J
R135	⚠ 9A01598700	R.,FUSIBLE 10 1/4W JA
R136,137	⚠ 9A00193400	R.,FUSIBLE 10 1/2W J
T001	9A02276900	TRANS.,PULSE
W006	9A02291500	TW,UL1007
X001	9A02264400	CRYSTAL,
X001	9A02264500	CRYSTAL,
X002	9A02291300	CERAMIC OSC,4.32M
X002	9A02291400	CERAMIC RESONATOR,
	*5760526600	PLATE,HEAT SINK
	*9A01591600	PLATE,HEAT SINK
	9A00766700	SCREW,BRZ S-TPG M3X8

SW PCB ASSY.....PD-465/ED-500/PD475/ED570

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02274900	SWITCH PCB ASSY,
	*9A02277000	PCB,STANDBY SWITCH
S201	9A02264900	SWITCH,PUSH
W002	9A02265000	JUMPER,2P

[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *regulre longer dellvery time

TRANS PCB ASSY.....PD-465/ED-500/PD-475/ED-570

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02275000	TRANS PCB ASSY,[US/C] ED-500/ED-570
	*9A02275020	TRANS PCB ASSY,[E/A] PD-465/PD-475
	*9A02275040	TRANS PCB ASSY,[GE] PD-465/PD-475
	*9A02277100	PCB,TRANS
	5760663000	EC TERMINAL,IP
	9A01046500	FUSE HOLDER,
	9A02280900	WIRE ASSY,[GE]
	9A02281000	WIRE ASSY,[GE]
	9A02281100	WIRE ASSY,[GE]
F301,302	△ 9A00198300	FUSE,500MA
W001	9A02277200	JUMPER,6P

CONTROL PCB ASSY.....PD-465/ED-500

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02275100	CONTROL PCB ASSY,
	*9A02277300	PCB,CONTROL
D401-403	9A02277700	DIODE,1SS253
D401-403	9A00774800	DIODE,GMA01-BT
FL401	9A02277800	ELT.,CPF2377
L401	9A02277900	COIL,CHOKE 100UH
Q401	9A01044000	TR.,2SC536G/NP/AA
Q401	9A00777500	TR.,2SC536F/NP
RU401	9A01775500	BX-1466
RU401	9A02266300	SBX1610-92
RU401	9A02266400	GP1U501X
S401	9A02277500	SWITCH,TACT
S401	9A02277600	SWITCH,TACT
S403-408	9A02277500	SWITCH,TACT
S403-408	9A02277600	SWITCH,TACT
S410,411	9A02277500	SWITCH,TACT
S410,411	9A02277600	SWITCH,TACT
W 3	9A02278000	WIRE,8PX160
W 4	9A02278100	WIRE,7PX160
W 5	9A02278200	WIRE,11PX160
	9A02277400	PAD,

CONTROL PCB ASSY.....PD-475/ED-570

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02353600	CONTROL PCB ASSY
	*9A02277300	PCB,CONTROL
	9A02277400	PAD,
S401	9A02277500	SWITCH,TACT
S401	9A02277600	SWITCH,TACT
S403-408	9A02277500	SWITCH,TACT
S403-408	9A02277600	SWITCH,TACT
S410,411	9A02277500	SWITCH,TACT
S410,411	9A02277600	SWITCH,TACT
D401-404	9A01043400	DIODE,1SS254
D401-404	9A00774800	DIODE,GMA01-BT
FL401	9A02277800	ELT.,CPF2377
L401	9A02277900	COIL,CHOKE 100UH
Q002	9A02342100	TR.,2SC3400
Q401	9A00777500	TR.,2SC536F/NP
Q401	9A01044000	TR.,2SC536G/NP/AA
RU401	9A01775500	BX-1466
RU401	9A02266300	SBX1610-92
RU401	9A02266400	GP1U501X
W003	9A02278000	WIRE,8PX160
W004	9A02278100	WIRE,7PX160
W005	9A02278200	WIRE,11PX160

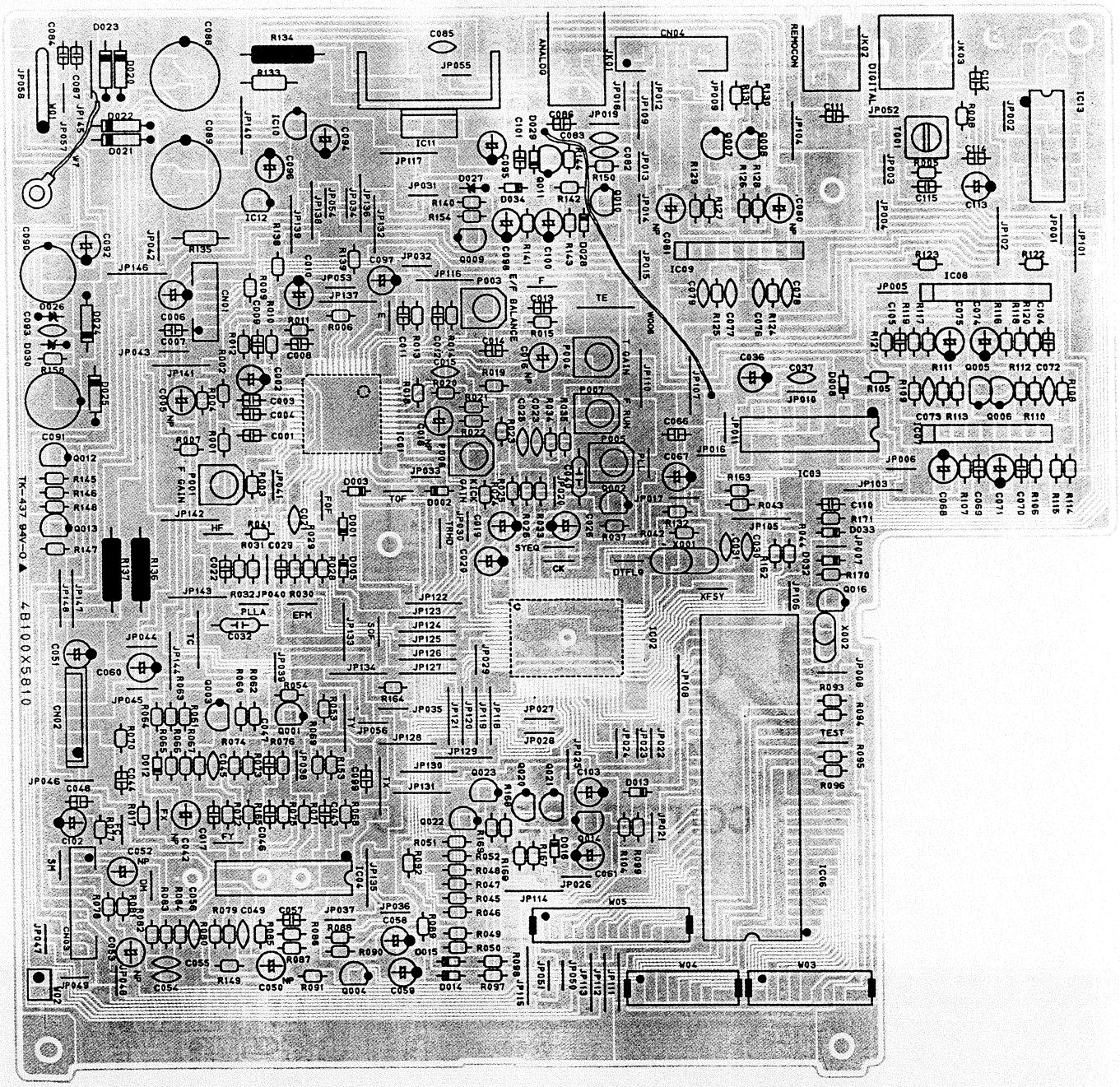
H.P. PCB ASSY.....PD-475/ED-570

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02353400	H.P. PCB ASSY,....PD-475
	*9A02538000	H.P. PCB ASSY,....ED-570
	*9A02354700	PCB,HEADPHONE
CN10	9A02355100	JUMPER,7P....PD-475
CN10	9A02355100	JUMPER,7P....ED-570
IC401	9A02354900	IC.,NJM4556D
JK401	9A02355000	JACK,3P....PD-475
JK401	9A02538600	JACK,3P....ED-570
Q401,402	9A00777500	TR.,2SC536F/NP
Q401,402	9A01044000	TR.,2SC536G/NP/AA
VR401	9A00439700	VR.,50KAX2

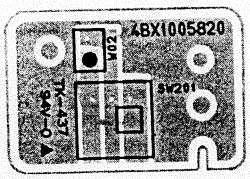
[US]:U.S.A [C]:CANADA [E]:EUROPE [A]:AUSTRALIA
[GE]:GENERAL EXPORT

Parts marked with *require longer delivery time

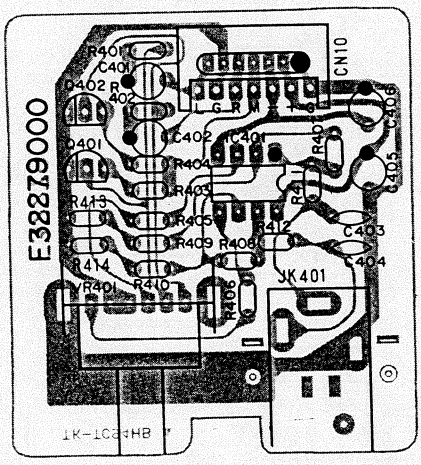
MAIN P.C.BOARD
(TOP VIEW)



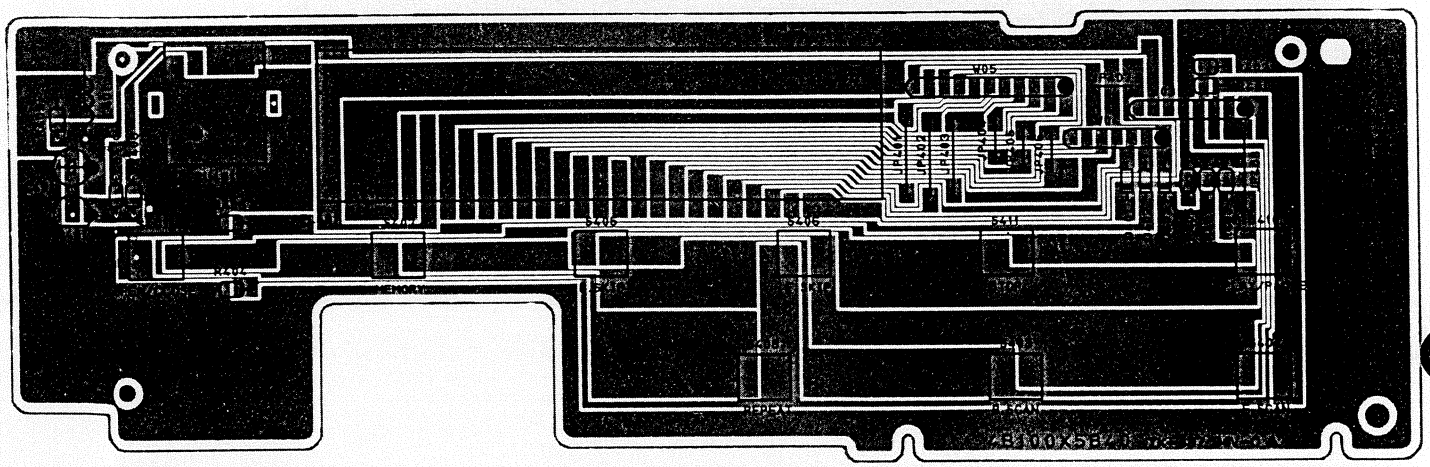
SWITCH P.C.BOARD
(TOP VIEW)



HEADPHONE P.C.BOARD
(TOP VIEW)

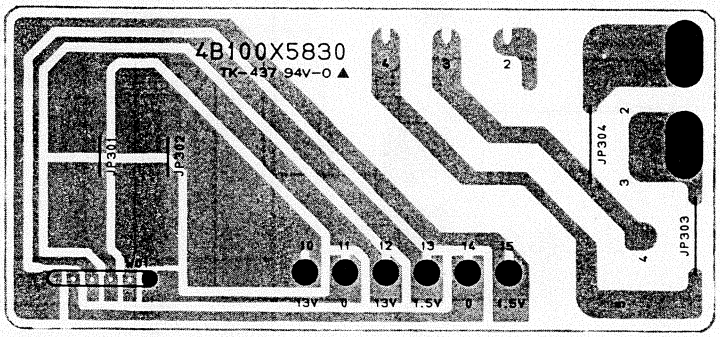


CONTROL P.C.BOARD
(TOP VIEW)

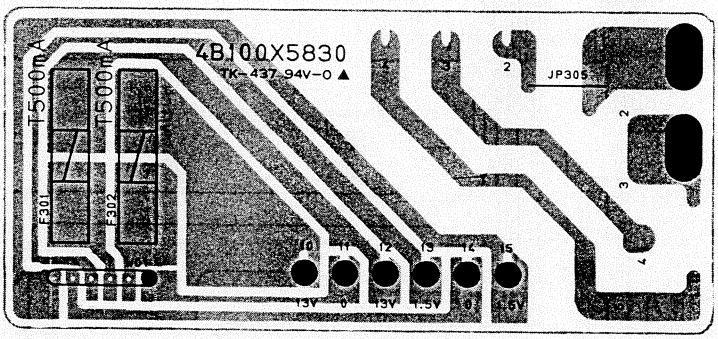


POWER SWITCH P.C.BOARD
(TOP VIEW)

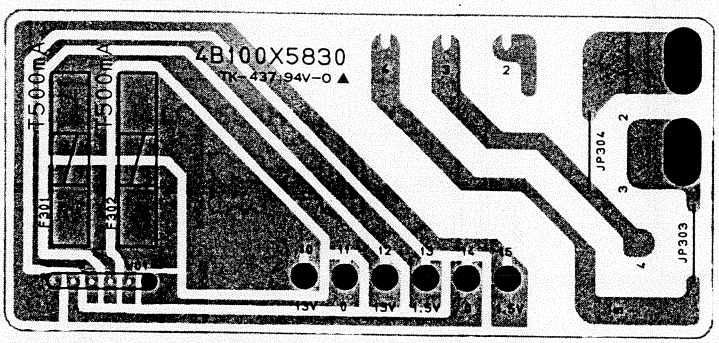
TCA
CND



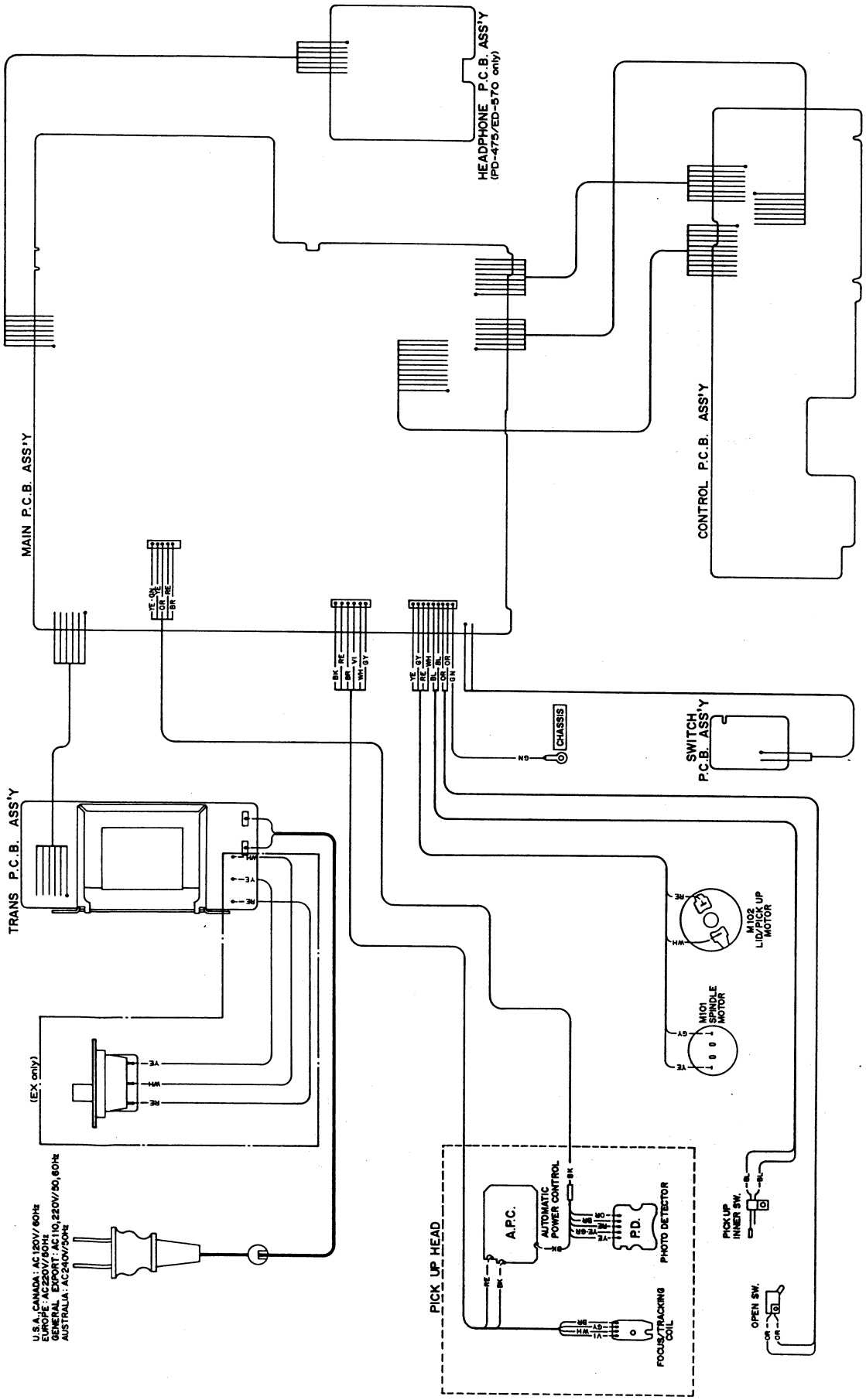
EX



EUR



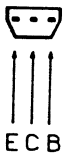
POINT TO POINT WIRING DIAGRAM



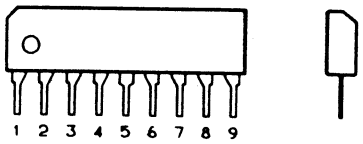
PD-465/ED-500/PD-475/ED-570 P.C.B ASS'Y PARTS NO.

MODELS	VERSION	MAIN P.C.B ASS'Y	STAND BY SW. P.C.B ASS'Y	TRANS P.C.B ASS'Y	CONTROL P.C.B ASS'Y	HEADPHONE P.C.B ASS'Y
PD-465	AUS	OB100X5811	OB100X5820	OB100X5831	OB100X5841	
	EX	OB100X5811	OB100X5820	OB100X5832	OB100X5841	
ED-500	CND	OB100X5811	OB100X5820	OB100X5830	OB100X5841	
	TCA	OB100X5811	OB100X5820	OB100X5830	OB100X5841	
PD-475	EUR	OB100X5812	OB100X5820	OB100X5831	OB100X5842	OB100X3301
	EX	OB100X5812	OB100X5820	OB100X5832	OB100X5842	OB100X3301
ED-570	CND	OB100X5812	OB100X5820	OB100X5830	OB100X5842	OB100X3301
	TCA	OB100X5812	OB100X5820	OB100X5830	OB100X5842	OB100X3301

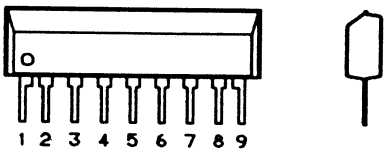
IC & TRANSISTOR LEAD IDENTIFICATION

TRANSISTORS	FRONT VIEWS	BOTTOM VIEWS
2SA608 2SC536		
2SC3400 2SD1012		
TERMINAL NAMES		
B → BASE C → COLLECTOR E → EMITTER		

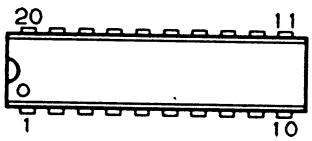
NJM2068S FRONT/SIDE VIEWS
LA6458SS FRONT/SIDE VIEWS
LA6462S FRONT/SIDE VIEWS



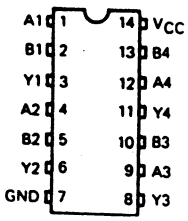
UPC4570HA FRONT/SIDE VIEWS



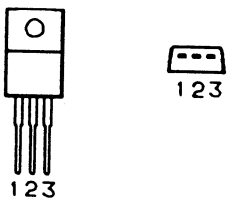
LC7881 TOP VIEW
FA5205P TOP VIEW



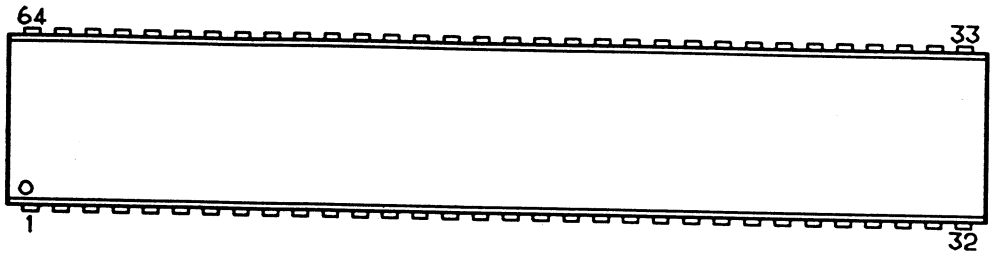
MC74HC00 TOP VIEW



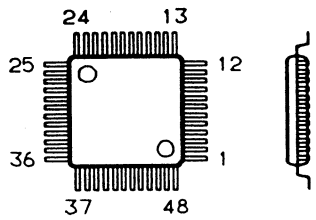
BA178M05/L78M05/NJM78M05A
MC7805/NJM78M05FA FRONT/BOTTOM VIEWS



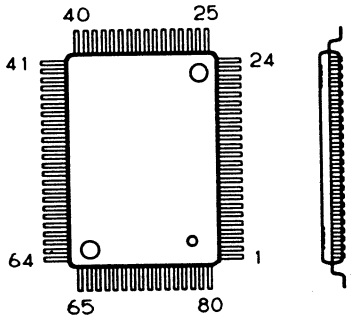
LC6554H-4301 TOP VIEW



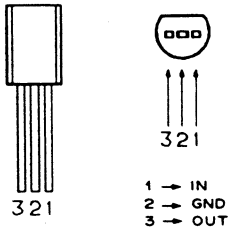
LA9200NM TOP/SIDE VIEWS



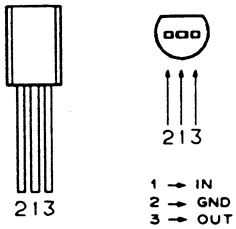
YM7121B TOP/SIDE VIEWS



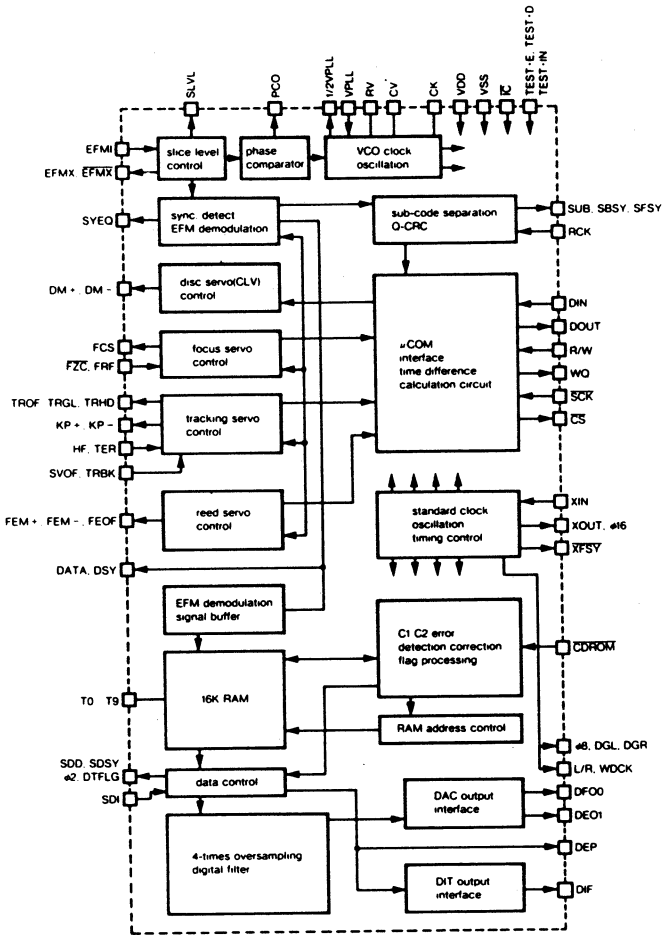
TA78L006AP FRONT/BOTTOM VIEWS



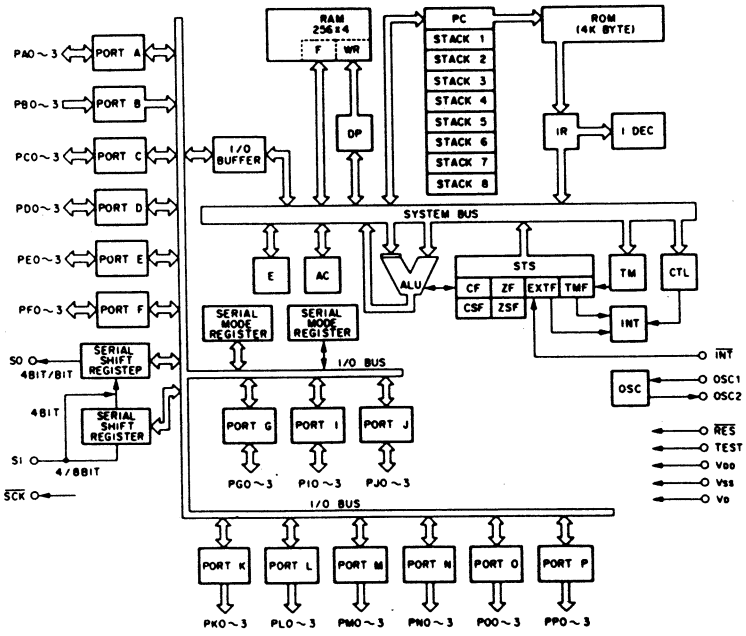
TA79L006P FRONT/BOTTOM VIEWS



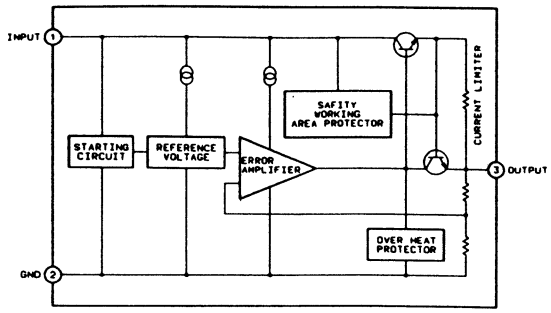
YM7121B BLOCK DIAGRAM



LC6554H BLOCK DIAGRAM

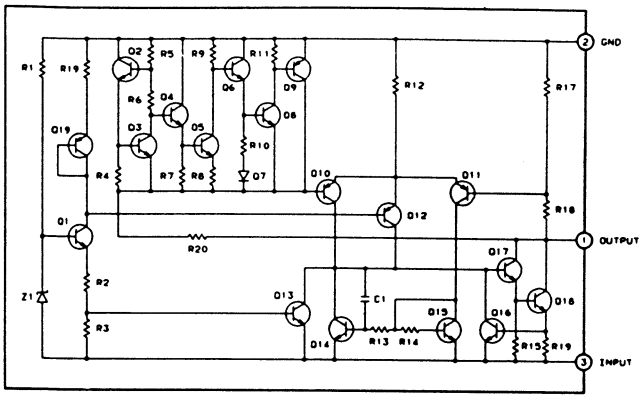


L78M05 TOP/SIDE VIEWS

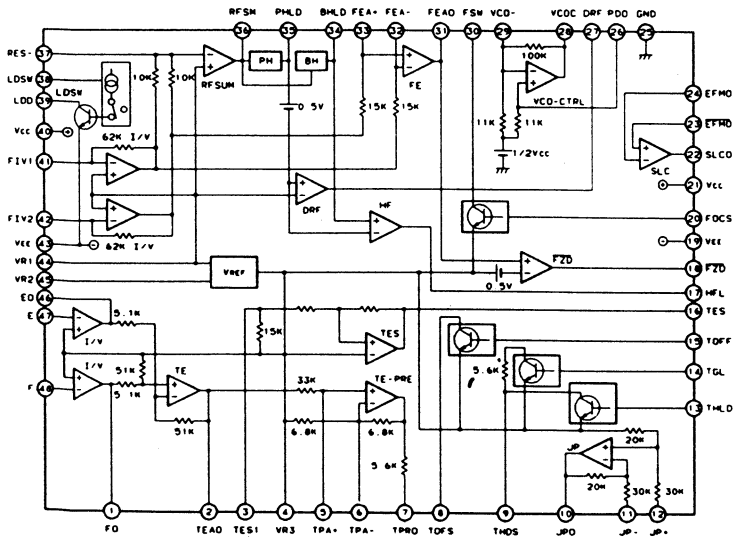


	INPUT	GND	OUTPUT
L78M05	1	2	3
NJM78M05FA	3	2	1

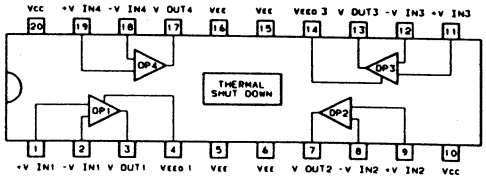
TA79L006P BLOCK DIAGRAM



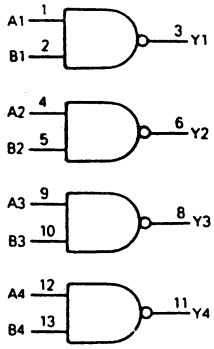
LA9200NM BLOCK DIAGRAM


RFSM PHLD BHLD FEA+ FEA- FEAO FSW VCO- VCOC DRF PDO GND
RES- LDSW LDD Vcc FIV1 FIV2 VEE VR1 VR2 EO E F
EFMO EFMD SLCO Vcc FOCS VEE FZD MFL TES TOFF TGL THLD
FO TEAO TES1 VR3 TPA+ TPA- TPRO TOFS THDS JPO JP- JP+

FA5205P BLOCK DIAGRAM


Vcc +V IN4 -V IN4 V OUT4 VEE VEE VEE 3 V OUT3 -V IN3 +V IN3
OP4
OP3
THERMAL SHUT DOWN
OP1
OP2
+V IN1 -V IN1 V OUT1 VEE 1 VEE VEE V OUT2 -V IN2 +V IN2 Vcc

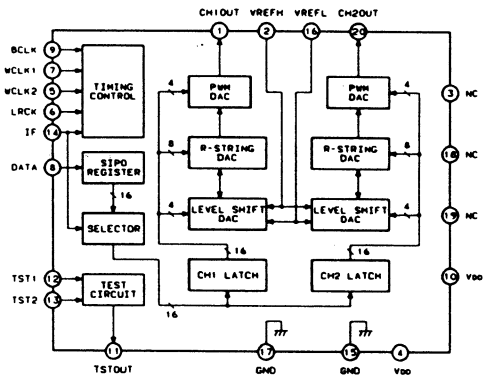
MC74HC00 BLOCK DIAGRAM



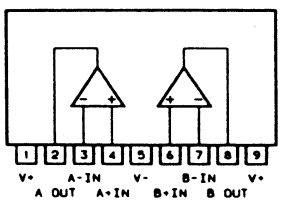
$Y = \overline{AB}$

V_{CC} = 14
GND = 7

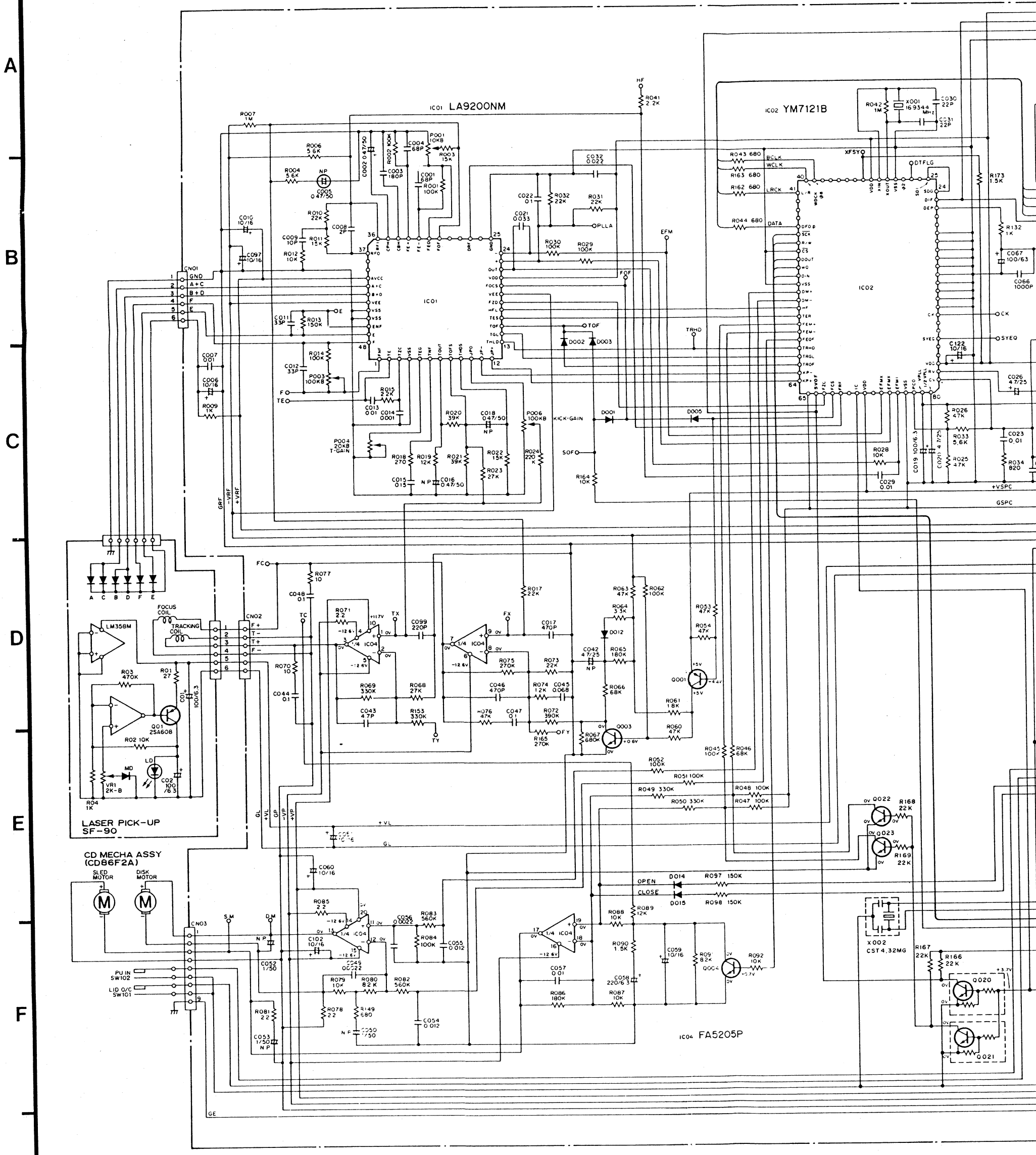
LC7881 BLOCK DIAGRAM



NJM2068S BLOCK DIAGRAM
UPC4570HA BLOCK DIAGRAM
LA6458SS BLOCK DIAGRAM



TEAC SCHEMATIC DIAGRAM PD-465/ED-500/PD-475/ED-570 Compact Disc Player



IC PIN NUMBER DC VOLTAGES

SYMBOL No	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC01	LA9200NM	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	5.0V	1.2V	0V	4.3V	4.3V	-5.5V	1.2V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		5.0V	2.1V	2.5V	2.5V	0V	2.5V	0V	2.5V	2.5V	0V	0V	0.6V	0.6V	-0.1V	-0.1V	-0.1V	0V	3.9V	-0.1V	5.9V
		41	42	43	44	45	46	47	48												
		0V	0V	-5.6V	0V	0V	0V	0V	0V												

IC PIN NUMBER DC VOLTAGES

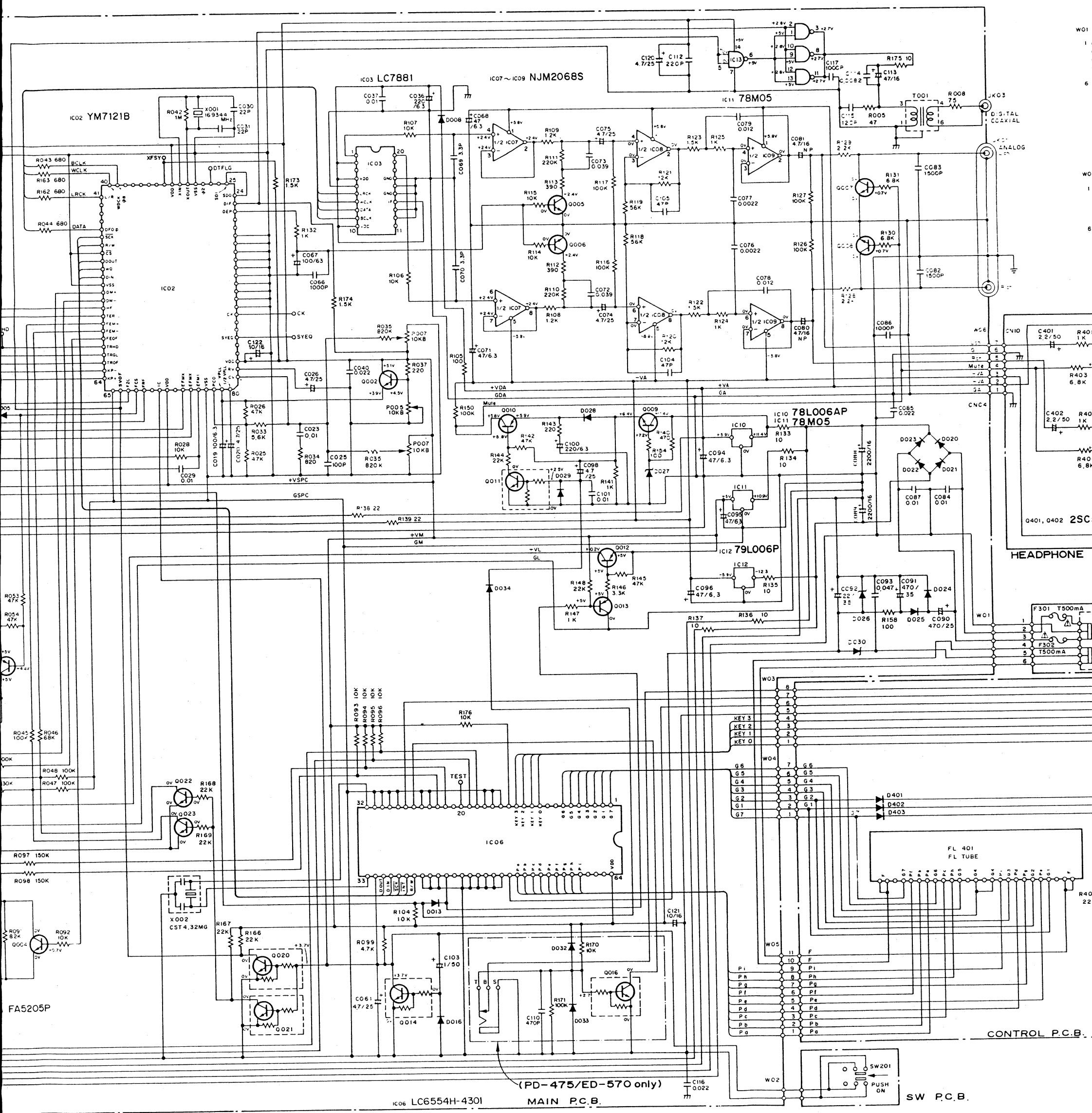
SYMBOL No	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC02	YM7121	2.0V	2.4V	5.0V	5.0V	5.0V	0V	0.3V	1.5V	2.7V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	2.6V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		0V	0V	2.8V	0V	0V	2.5V	3.4V	2.7V	0V	1.9V	2.3V	5.0V	5.0V	0V	0V	0V	0V	5.0V	2.6V	2.9V
		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
		2.7V	1.7V	1.7V	0V	0V	0V	0V	0V	0V	0V	5.0V	0V	0V	0V	4.3V	0V	0V	0V	5.0V	0V
		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
		5.0V	0V	0V	0V	0V	0V	4.3V	0V	0V	5.0V	5.0V	5.0V	3.3V	2.6V	2.7V	2.1V	0V	2.0V	3.9V	2.0V

IC PIN NUMBER DC VOLTAGES

SYMBOL No	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
IC03	LC7881	2.5V	4.9V	4.9V	4.9V	0V	2.7V	2.9V	0V	2.5V	4.9V	0.5V	0V	0V	4.9V	0V	0V	0V

IC PIN NUMBER DC VOLTAGES

SYMBOL No	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
IC06	LC6554H-4301	-17.0V	-17.5V	-17.5V	-17.5V	-17.5V	-17.5V	-17.5V	-20V	-20V	0V	0V	0V	0V	0.2V	0V	0V	0V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
		5.0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	2.2V	2.4V	3.7V	0V	5.0V	5.0V
		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
		0V	0V	5.0V	0.4V	0V	0V	0V	0V	0V	0V	-21V	-6.8V	-6.8V	-6.8V	-6.8V	-7.3V	-7.3
		61	62	63	64													
		-20V	-20V	-20V	5.0V													



IC PIN NUMBER DC VOLTAGES																			
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	4.9V	4.9V	4.9V	0V	2.7V	2.9V	0V	2.5V	4.9V	0.5V	0V	0V	4.9V	0V	0V	0V	0V	2.5V	

IC PIN NUMBER DC VOLTAGES																			
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0V	-17.5V	-17.5V	-17.5V	-17.5V	-17.5V	-17.5V	-20V	-20V	0V	0V	0V	0V	0.2V	0V	0V	0V	5.0V	5.0V	5.0V
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	2.2V	2.4V	3.7V	0V	5.0V	5.0V	0V	0V	0V
	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	0V	5.0V	0.4V	0V	0V	0V	0V	0V	0V	-21V	-6.8V	-6.8V	-6.8V	-6.8V	-7.3V	-7.3V	-20V	-20V	-20V
	62	63	64																
	-20V	-20V	5.0V																

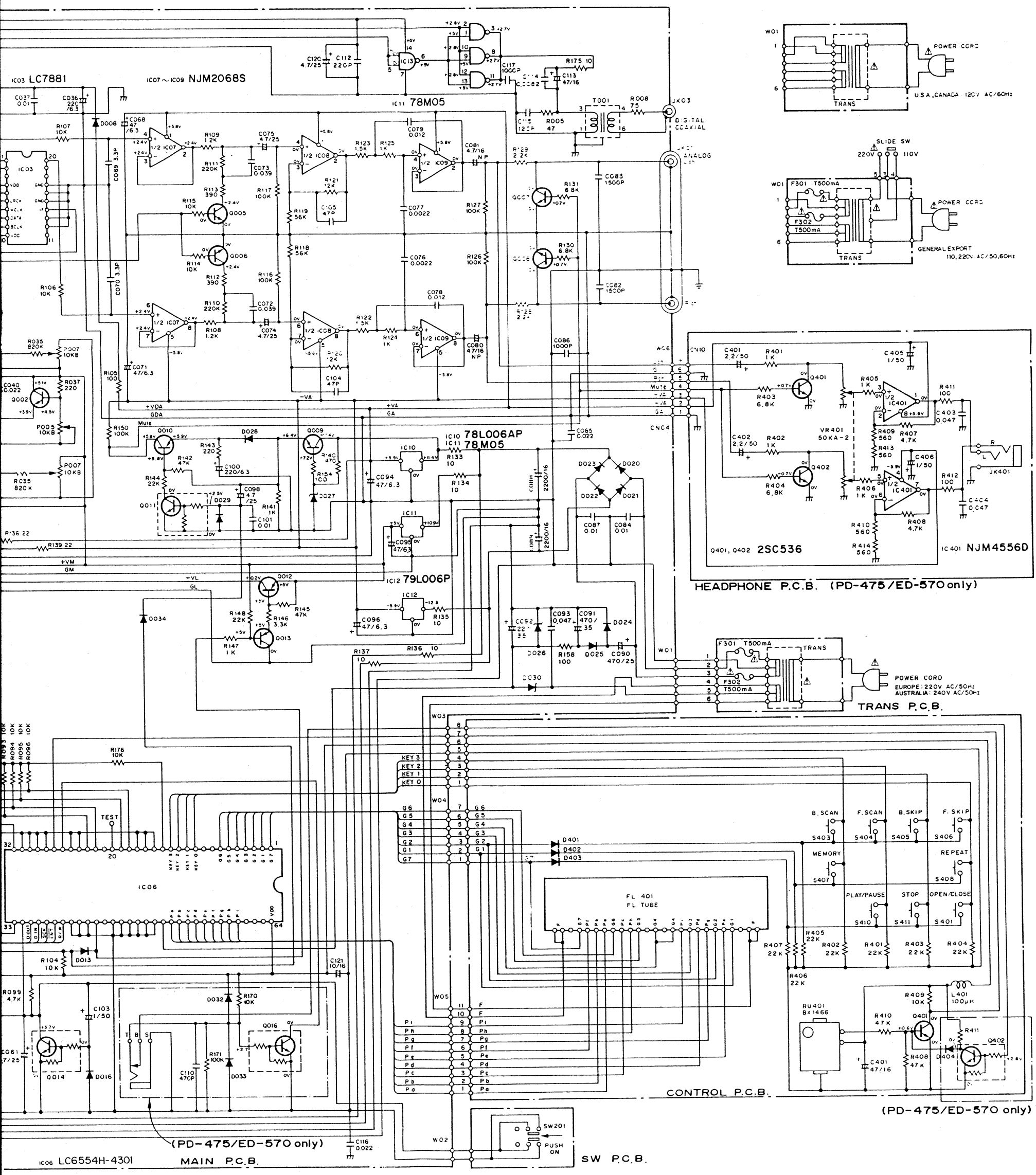
NOTES:

1. All resistors values are indicated in "ohm" (K = 10^3, M = 10^6).
2. All capacitors values are indicated in "μF" (P = 10^{-12}).
3. All voltages indicated on the schematics are measured under the following conditions.
   a. Use a V.T.V.M.
   b. All voltages ±10% with respect to chassis ground.
   c. No signals at input terminals.
   d. AC input at 220 or 240 volts 50Hz. and 120 volts 60 Hz.
4. This is a basic schematic diagram.

CHUO DENKI CO., LTD. reserves the right to make any changes or modifications without notice for improvements.

PRODUCT SAFE

Each precaution in this mar
during servicing. Components
symbol ⚠ in the parts list an
designate components in whic
significance. When replacing
with ⚠, use only the replace
parts with the same ratings
voltage that are designated in t
Leakage-current or resistanc
made to determine that expo
insulated from the supply ci
product to the customer.



NOTES:

1. All resistors values are indicated in "ohm" (K=10^3, M=10^6).
2. All capacitors values are indicated in "μF" (P=10^{-12}).
3. All voltages indicated on the schematics are measured under the following conditions.
   a. Use a V.T.V.M.
   b. All voltages ±10% with respect to chassis ground.
   c. No signals at input terminals.
   d. AC input at 220 or 240 volts 50Hz. and 120 volts 60 Hz.
4. This is a basic schematic diagram.

CHUO DENKI CO., LTD. reserves the right to make any changes or modifications without notice for improvements.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

PD-465/ED-500/PD-475/ED-570 Compact Disc Player